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The Oriental species of *Platydema* Laporte & Brullé, with descriptions of 16 new species (Coleoptera: Tenebrionidae)[1]

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Abstract

The Oriental species of the genus *Platydema* Laporte & Brullé (Coleoptera: Tenebrionidae: Diaperini) are revised. Not included are Palaearctic taxa known exclusively from Siberia, Japan, Taiwan and Korea, as well as Himalayan taxa being revised earlier. The diagnostic characters of all species are figured. – New species: *Platydema andoi* **n. sp.** (Borneo), *Platydema becvari* **n. sp.** (W Malaysia), *Platydema bocaki* **n. sp.** (Thailand), *Platydema cardamonicum* **n. sp.** (S India), *Platydema guangxicum* **n. sp.** (China: Guangxi), *Platydema kovaci* **n. sp.** (W Malaysia), *Platydema loebli* **n. sp.** (S India), *Platydema masumotoi* **n. sp.** (Borneo), *Platydema merkli* **n. sp.** (Sumatra), *Platydema mindanaoicum* **n. sp.** (Philippines: Mindanao), *Platydema palungicum* **n. sp.** (Borneo), *Platydema poringicum* **n. sp.** (Borneo), *Platydema reibnitzi* **n. sp.** (Sumatra, Borneo, W Malaysia), *Platydema riedeli* **n. sp.** (Sumatra), *Platydema sulawesicum* **n. sp.** (Sulawesi), *Platydema yunnanicum* **n. sp.** (China: Yunnan). – New synonyms: *Platydema* Laporte & Brullé, 1831 (*Anisocara* Gebien, 1925 **n. syn.**), *Platydema alticornis* Gravely, 1915 (*Anisocara gynandromorpha* Gebien, 1925 **n. syn.**), *Platydema aurimaculatum* Gravely, 1915 (*Platydema cederholmi* Kaszab, 1980 **n. syn.**, *Platydema monoceratoides* Masumoto, 1982 **n. syn.**), *Platydema jacobsoni* Gebien, 1927 (*Platydema selatana* Masumoto & Makihara, 1997 **n. syn.**), *Platydema marseuli* Lewis, 1894 (*Platydema benakatensis* Masumoto & Makihara, 1997 **n. syn.**), *Platydema parachalceum* Masumoto, 1982 (*Platydema zoltani* Masumoto, 1985 **n. syn.**), *Platydema planum* Gebien, 1914 (*Platydema pilosiventre* Gebien, 1925 **n. syn.**), *Platydema sericeum* Gebien, 1914 (*Platydema latemarginatum* Gebien, 1927 **n. syn.**). – New combinations: *Ischnodactylus bifasciatus* (Motschulsky, 1873) **n. comb.**, *Ischnodactylus plagiatus* (Motschulsky, 1873) **n. comb.**, *Ischnodactylus rufopiceus* (Motschulsky, 1873) **n. comb.**, *Ischnodactylus sexpictus* (Kaszab, 1939) **n. comb.** – Lectotype designations are given for *Platydema sauteri* Gebien, 1913 and *Platydema coeruleum* Gebien, 1925, both from Taiwan.
Keywords: Coleoptera, Tenebrionidae, Diaperini, *Platydema*, Oriental, new species, new synonyms, taxonomy.

[1] Contributions to Tenebrionidae, no. 48. – For no. 47 see Annals of the Transvaal Museum 41 (2004).

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Zusammenfassung

Die orientalischen Arten der Gattung *Platydema* Laporte & Brullé (Coleoptera: Tenebrionidae: Diaperini) werden revidiert. Nicht eingeschlossen sind die paläarktischen Taxa, die ausschliesslich aus Sibirien, Japan, Taiwan und Korea bekannt sind, und die schon früher revidierten Arten des Himalaya. Die diagnostischen Merkmale aller Arten werden abgebildet. – Neue Arten: *Platydema andoi* **n. sp.** (Borneo), *Platydema becvari* **n. sp.** (W Malaysia), *Platydema bocaki* **n. sp.** (Thailand), *Platydema cardamonicum* **n. sp.** (S Indien), *Platydema guangxicum* **n. sp.** (China: Guangxi), *Platydema kovaci* **n. sp.** (W Malaysia), *Platydema loebli* **n. sp.** (S Indien), *Platydema masumotoi* **n. sp.** (Borneo), *Platydema merkli* **n. sp.** (Sumatra), *Platydema mindanaoicum* **n. sp.** (Philippinen: Mindanao), *Platydema palungicum* **n. sp.** (Borneo), *Platydema poringicum* **n. sp.** (Borneo), *Platydema reibnitzi* **n. sp.** (Sumatra, Borneo, W Malaysia), *Platydema riedeli* **n. sp.** (Sumatra), *Platydema sulawesicum* **n. sp.** (Sulawesi), *Platydema yunnanicum* **n. sp.** (China: Yunnan). – Neue Synonyme: *Platydema* Laporte & Brullé, 1831 (*Anisocara* Gebien, 1925 **n. syn.**), *Platydema alticornis* Gravely, 1915 (*Anisocara gynandromorpha* Gebien, 1925 **n. syn.**), *Platydema aurimaculatum* Gravely, 1915 (*Platydema cederholmi* Kaszab, 1980 **n. syn.**, *Platydema monoceratoides* Masumoto, 1982 **n. syn.**), *Platydema jacobsoni* Gebien, 1927 (*Platydema selatana* Masumoto & Makihara, 1997 **n. syn.**), *Platydema marseuli* Lewis, 1894 (*Platydema benakatensis* Masumoto & Makihara, 1997 **n. syn.**), *Platydema parachalceum* Masumoto, 1982 (*Platydema zoltani* Masumoto, 1985 **n. syn.**), *Platydema planum* Gebien, 1914 (*Platydema pilosiventre* Gebien, 1925 **n. syn.**), *Platydema sericeum* Gebien, 1914 (*Platydema latemarginatum* Gebien, 1927 **n. syn.**). – Neue Kombinationen: *Ischnodactylus bifasciatus* (Motschulsky, 1873) **n. comb.**, *Ischnodactylus plagiatus* (Motschulsky, 1873) **n. comb.**, *Ischnodactylus rufopiceus* (Motschulsky, 1873) **n. comb.**, *Ischnodactylus sexpictus* (Kaszab, 1939) **n. comb.** – Lectotypen-Designierungen werden gegeben für *Platydema sauteri* Gebien, 1913 und *Platydema coeruleum* Gebien, 1925, beide von Taiwan.

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1 Introduction

The genus *Platydema* Laporte & Brullé, 1831 (type species *Platydema dejeanii* Laporte & Brullé, 1831) is a species-rich genus of the tenebrionid tribe Diaperini with more than 250 species occurring in all faunal regions, but being most speciose in the tropics. The present paper is the third in a series of revisions of species of *Platydema* from the Himalayas (Schawaller 2003) and from Africa south of the Sahara (Schawaller 2004). The present contribution includes all species of *Platydema* occurring in southeastern Asia as defined in the map (Fig. 1). Not included, but considered for comparison if necessary, are Palaearctic taxa known exclusively from Siberia, Japan, Taiwan and Korea. Also not included are specimens from the Maluku Islands (for example Halmahera, Seram); these taxa will be treated later together with the Papuan species. Himalayan species which were revised earlier are only considered if new material is listed, but diagnostic figures published by Schawaller (2003) are not repeated here.

The Oriental species of *Platydema* have been described in various papers which were summarized only once by Gebien (1925b). In that paper, Gebien also dis-

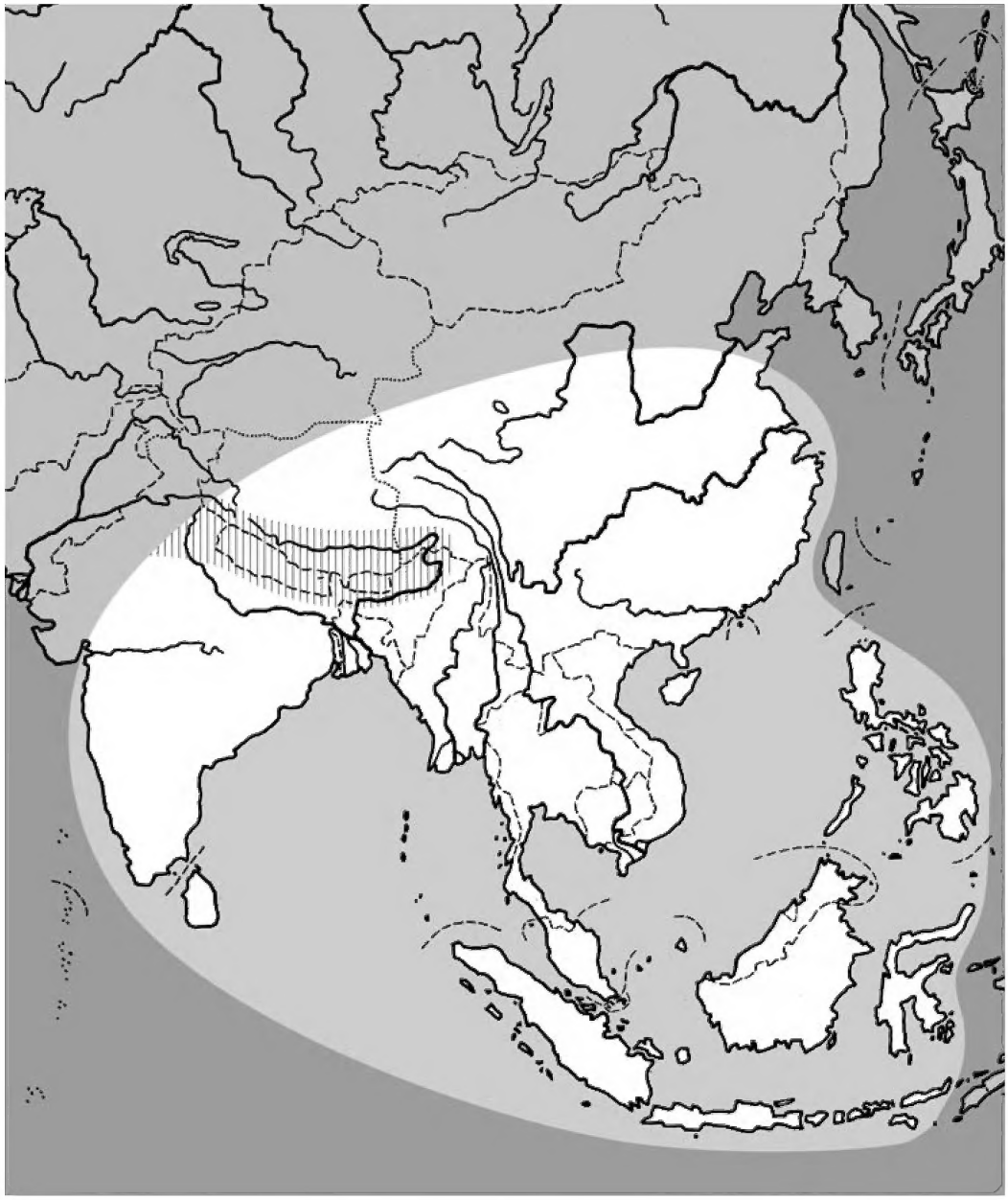

Fig. 1. The treated area in southeastern Asia. Species from the Himalayas (hatched) have been published separately (SCHAWALLER 2003).

cussed the problem of dividing this huge genus, distributed world-wide, into natural species-groups. TRIPLEHORN (1965) discussed the tribal limits of the Diaperini, and gave diagnoses of the American genera including *Platydema*. Although the generic separation within the Diaperini is not satisfying, a few species are excluded herein from *Platydema* and are transferred to *Ischnodactylus*. Doubtful taxa within *Platydema* and other genera mainly described by PIC (listed in chapter 4) must remain as nomina dubia as long as the corresponding types are not available.

GEBIEN usually labelled the type-material of his new species in German as "Type" and "Cotype", which is interpreted as holotype and paratypes. In these cases, a lectotype designation seems not necessary. However, in two taxa (*Platydema coeruleum* and *P. sauteri*) he labelled a series of type-specimens equally as "Type", so the original descriptions are based on an unspecified number of syntypes. In view of the frequent confusion with similar species, lectotypes are designated here in order to fix a single name-bearing type and thus to define the species.

All species of *Platydema* are restricted to fungi-habitats on old trees and might be considered as an indicator for mature forests, thus being endangered worldwide. The males of several species possess striking modifications on the head (horns, teeth), similar to species from other "fungus-adapted" and partly not related tenebrionid genera (for example *Rhipidandrus* Leconte, 1862; *Byrsax* Pascoe, 1860; *Neomida* Latreille, 1829; *Ischnodactylus* Chevrolat, 1877).

Acronyms of depositories

BMNH	The Natural History Museum London (MAX BARCLAY)
CJTK	Collection JAROSLAV TURNA, Kostelec Na Hane
CKAO	Collection Dr. KIYOSHI ANDO, Osaka
CKMT	Collection Dr. KIMIO MASUMOTO, Tokyo
CMLS	Collection MARTIN LILLIG, Saarbrücken
CRGT	Collection Dr. ROLAND GRIMM, Tübingen
CRSW	Collection RUDOLF SCHUH, Wien
CSBC	Collection STANISLAV BEČVÁŘ, České Budějovice
DEI	Deutsches Entomologisches Institut, Müncheberg (Dr. LOTHAR ZERCHE)
HNHM	Hungarian Natural History Museum, Budapest (Dr. OTTÓ MERKL)
MHNG	Museum d'Histoire Naturelle, Genève (Dr. GIULIO CUCCODORO)
MNHUB	Museum für Naturkunde der Humboldt-Universität, Berlin (Dr. MANFRED UHLIG)
NHMB	Naturhistorisches Museum, Basel (Dr. DANIEL BURCKHARDT)
NHMB-F	Naturhistorisches Museum, Basel, collection FREY (Dr. EVA SPRECHER)
NSMT	National Science Museum, Tokyo (Dr. SHUHEI NOMURA)
SMF	Senckenberg-Museum, Frankfurt/M. (Dr. DAMIR KOVAC)
SMNS	Staatliches Museum für Naturkunde, Stuttgart (author)
ZMUM	Zoological Museum of the Lomonosov State University, Moscow (Dr. NICOLAI NIKITSKY)
ZSM	Zoologische Staatssammlung, München (Dr. MARTIN BAEHR)

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2 Species characters

A combination of the following morphological characters is considered as species-specific within *Platydema* (as in the previous contributions: SCHAWALLER 2003, 2004): Body shape and size, colour pattern, dorsal setation, dorsal punctation, structure of the elytral intervals, proportions of the antennomeres, structure of the male head, width of the frons between the eyes, and structure of the aedeagus. In a

few cases, single characters showing some variation are considered as infraspecific. For example, in *Platydema subfascium* the males "usually" have an asymmetrical head armature (right horn long with setation, left horn short without setation), but sometimes, even syntopically, males exist with two long symmetrical horns, both with a setation at the tip; all other characters well agree.

The previously known characters are not suitable for dividing the species-rich and world-wide distributed genus in natural subgenera. Here we face a general problem in tenebrionid systematics occurring in nearly all huge genera each with hundreds of species (for example in *Laena* Latreille, 1829; *Strongylium* Kirby, 1818; *Gonocephalum* Chevrolat, 1849; *Amarygmus* Dalman, 1823). In *Platydema*, for example, it is possible to divide the genus into species with or without an armature on the male head, but this separation would be absolutely typological and artificial, as already discussed by Gebien (1925b). On the other hand, the species similar to *Platydema detersum*, for example, with modified male mesotibiae surely represent a natural group, but when extracting those species into a particular subgenus: what to do with the huge rest? To say it in other words: at present it seems impossible to separate *Platydema* into natural species groups (subgenera).

Some species even possess characters which are "unusual" among the congeners, suggesting that the genus *Platydema* in the present arrangement may be paraphyletic. For example, the general shape of the aedeagus of certain species (for example in *Platydema schultheissi*) distinctly varies from congeners. This holds true also for the length and dilatation of the antennomeres in some species (*Platydema brahma*, *P. nuciferae*, *P. flavopictum*). A few species have extraordinarily small eyes (e. g. *Platydema pentaphylloides*), other species (e. g. *Platydema pentaphylloides*) have a longer and spiny setation on the tibiae. The dilated tarsi in males of some African species (*Platydema latitarse*) are even unusual within the whole tribe Diaperini. In some cases, these problems might be interpreted as convergent evolution, but a satisfied solution for these discrepancies is not yet found.

3 The known Oriental species of *Platydema* Laporte & Brullé, 1831

Platydema alticornis Gravely, 1915

Anisocara gynandromorpha Gebien, 1925 **n. syn.**

New material: E Thailand, Chanthaburi Distr., Khao, Soi Dao, 5.–13.V.1998, leg. J. Horák, 1 ♂ CRGT. – N Thailand, Chiang Mai, Doi Suthep, 1200–1300 m, 28.IV.2004, leg. W. Schawaller, 1 ex. SMNS.

Synonymy: Gebien (1925c) described *Anisocara* and pointed to a close relationship to *Platydema*, but the prolonged head, the prolonged third antennomere and four impressions at the pronotal base are said to be generic characters for *Anisocara*. If species with a modified male head and species without any modified head are both included within the genus *Platydema*, then I can not follow the argument to establish a new genus for a species with a particularly modified head. Prolonged antennomeres 3 occur also in other species of *Platydema* as well as impressions at the pronotal base. The original description of *Platydema alticornis* Gravely, 1915 with the included figures treats the same taxon without any doubt. Therefore, *Anisocara* is considered as a new synonym of *Platydema*, and *A. gynandromorpha* Gebien,

1925 as a new synonym of *P. alticornis* Gravely, 1915. See also remarks under *Platydema cardamonicum* n. sp.

Remarks: Described and figured by SCHAWALLER (2003).

Distribution: Nepal, Laos, Thailand, Burma (type locality Tenasserim of *P. alticornis*), Vietnam, Taiwan, Java (type locality of *P. gynandromorpha*), Luzon.

Platydema aurimaculatum Gravely, 1915

Platydema cederholmi Kaszab, 1980 **n. syn.**
Platydema monoceratoides Masumoto, 1982 **n. syn.**

Studied type-material: Sri Lanka, Uva, Diyaluma Falls, 400 m, 23.I.1970, leg. R. MUSSARD, C. BESUCHET & I. LÖBL, 1 ♀ paratype of *P. cederholmi* MHNG. – Sri Lanka, Sabaragamuwa, Ambepussa-Polganawela, 16.I.1970, leg. R. MUSSARD, C. BESUCHET & I. LÖBL, 1 ♂ paratype of *P. cederholmi* HNHM. – Taiwan, Yangmingshan, 27.VI.1981, leg. K. MASUMOTO, 1 ♂ paratype of *P. monoceratoides* HNHM [labelled as *P. monocerosoides*].

New material: S India, Kerala, Cardamon Hills, 10 km SW Munnar, Vattiar, 1000 m, 5.–17.XII.1993, leg. D. BOUKAL & Z. KEJVAL, 1 ex. CSBC. – Taiwan, Shammei, 600 m, 23.V.1977, leg. J. KLAPPERICH, 2 ex. HNHM. – Taiwan, Taipei County, Haeng-Lu Dyi, 2.–21.IV.2002, leg. G. FÁBIÁN & O. MERKL, 1 ex. HNHM. – Burma, Bhamò, VII.1886, leg. L. FEA, 2 ex. DEI, 1 ex. MNHUB. – W Thailand, Klong Lan NP, 50 km SW Kamphaeng Phet, 2.–5.VII.1997, leg. J. REJSEK, 1 ex. SMNS.

Synonymy: The examined type-material of *Platydema cederholmi* as well as of *P. monoceratoides* completely agrees with the already treated and figured material of *P. aurimaculatum* (SCHAWALLER 2003), thus *P. cederholmi* Kaszab, 1980 and *P. monoceratoides* Masumoto, 1982 are considered as new synonyms of *P. aurimaculatum* Gravely, 1915.

Distribution: India, Sri Lanka (type locality of *P. cederholmi*), Burma, Thailand, Laos, Taiwan (type locality of *P. monoceratoides*).

Platydema brahma Schawaller, 2003

Remarks: Described and figured by SCHAWALLER (2003).

Distribution: Himalayas.

Platydema capreolum (Chevrolat, 1877)

New material: India, Madras, Anaimalai Hills, Cinchona, 3500 ft., V.1964, leg. NATHAN, 1 ex. CRGT. – Thailand, near Chiang Mai, 30.IV.1985, leg. M. TAO, 1 ex. CKAO. – Thailand, NW Chiang Mai, Mokfa Waterfalls, 15.V.1999, leg. R. GRIMM, 1 ex. CRGT. – Thailand, Prov. Mae Hong Song, Pai, Morpang Waterfalls, 800 m, 24.IV.2004, leg. R. GRIMM, 4 ex. CRGT, 1 ex. SMNS. – Vietnam, Hoa-Binh, 1928, leg. A. de COOMAN, 1 ex. CKAO. – Vietnam, Ha Long, 6.–7.XI.1988, leg. S. BEČVÁŘ, 1 ex. CSBC.

Remarks: Described and figured by SCHAWALLER (2003). The species description based on the ♀ holotype appeared 1877, the (? conspecific) male was described one year later (CHEVROLAT 1878). See also remarks under *Platydema lewisi* Kaszab, 1980.

Distribution: Sri Lanka, India, S Nepal, Burma, Thailand, Laos, Vietnam.

Platydema cechenosternoides Kaszab, 1982 (Figs. 50, 76–78)

Studied type-material: Burma, Tenasserim, Thagata, ♂ holotype HNHM.

New material: N Thailand, W Chiang Mai, Doi Suthep Pui NP, 30.V.1999, leg. R. GRIMM, 6 ex. CRGT. – N Thailand, Chiang Mai, Doi Pui Mt., 1000–1600 m, 26.IV.–9.V.1996,

leg. S. Bečvář, 1 ex. CSBC. – N Thailand, Chiang Mai, Doi Suthep, 1300–1400 m, 19. and 31.XII.1988, leg. J. Trautner & K. Geigenmüller, 4 ex. SMNS.

Distribution: Burma (type locality Tenasserim), Thailand.

Platydema ceroprioides Gebien, 1927

New material: Malaysia, Fraser's Hill, 9.VI.1975, leg. Y. Kiyoyama, 1 ex. CKAO. – Malaysia, Cameron Highlands, 26.III.1975, leg. Y. Kiyoyama, 1 ex. CKAO. – Malaysia, Pahang, Cameron Highlands, Tanah Rata, Gunung Jasar, 1400–1500 m, 20.–25.I. and 19.–25.VI.1995, leg. S. Bečvář, 3 ex. CSBC. – N Sumatra, Lake Toba, 3.IV.1997, leg. N. Kanie, 2 ex. CKAO, 1 ex. SMNS. – Sumatra, Prov. Aceh-Selatan, Babahrot, 100 m, 15.–20. VIII.1983, leg. J. Klapperich, 4 ex. HNHM, 1 ex. SMNS. – S Sulawesi, Palopo, Puncak, V.1999, local collector, 1 ex. CSBC.

Remarks: Described and figured by Schawaller (2003). One of the listed males from the Cameron Highlands bears artificially only a single right horn on the head, the left horn is lacking (not broken).

Distribution: Sumatra, Sulawesi, W Malaysia, Vietnam.

Platydema chalceum Gebien, 1925

Remarks: Described and figured by Schawaller (2003).

Distribution: Java, Borneo, India.

Platydema coeruleum Gebien, 1925 (Figs. 8, 64–66)

Studied type-material: Taiwan (Formosa), Kosempo, XI.1909–II.1910, leg. H. Sauter, 15 syntypes MNHUB, 1 ♂ designated herewith as lectotype, the remaining others as paralectotypes.

Remarks: Not yet known from continental China.

Distribution: Taiwan (type locality).

Platydema detersum Walker, 1858

Platydema umbratum Marseul, 1876 ?syn.

New material: China, Yunnan, Jinghong, 10.–14.VII.1990, leg. S. Bečvář, 2 ex. CSBC, 1 ex. SMNS. – Sri Lanka, Ratnapura Distr., 2 km S Hayes, 29.–30.XI.1995, leg. S. Bečvář & V. Kostál, 1 ex. CSBC. – Thailand, Phuket, Surin-Bang Thao, 10.–15.II.2000, leg. E. Heiss, 2 ex. CRGT. – N Thailand, Chiang Mai, Mae Ngad Dam, 23.XI.2001, leg. R. Grimm, 2 ex. CRGT. – N Thailand, Chiang Mai, Chiang Dao, Kariang, 11.V.2003, leg. R. Grimm, 2 ex. CRGT. – Vietnam, Tam Dao, 20.III.1962, leg. Kabakov, 1 ex. SMNS. – Borneo, Sarawak, Belaga, 14.–16.III.1990, leg. A. Riedel, 1 ex. SMNS. – Borneo, Sabah, Mt. Trus Madi, 1000 m, 1.IV.1994, leg. N. Kanie, 1 ex. CKAO. – W Sumatra, Lembah Harau Reserve, N Payakumbuh, 7.IV.1996, leg. S. Bečvář, 1 ex. CSBC. – W Sumatra, above Padangpanjang, 2.–6.IV.1996, leg. S. Bečvář, 1 ex. CSBC. – Sulawesi, Palopo, Puncak, V.1999, local collector, 2 ex. CSBC. – Sulawesi, Puncak Palopo, 2.I.2000, leg. K. Ando, 1 ex. CKAO. – Sulawesi, 17 km E Pendolo, 800 m, 4.–9.VII.1999, leg. L. Bolm, 1 ex. SMNS. – Sulawesi, 20 km SE Tambarana, Camp Mauro, 11.–16.VII.1999, leg. L. Bolm, 1 ex. SMNS. – Philippines, Panay, 10 km E Sibalom, 10.XII.1990, leg. L. Bolm, 2 ex. NHMB. – Philippines, Panay, 8 km E Bontol, 200 m, 10.–11.XII.1990, leg. L. Bolm, 2 ex. NHMB.

Remarks: Described and figured by Schawaller (2003). Middle tibia of males strongly curved, unusual character within *Platydema*. It should be checked if *Platydema umbratum* Marseul, 1876 from Japan and *P. sakishimense* Nakane, 1973 from Taiwan belong to the same species. I have seen 2 specimens from Taiwan (Formosa,

leg. H. SAUTER, 2 ex. in DEI, *P. umbratum* det. GEBIEN), which fully coincide with the widespread *P. detersum*.

Distribution: Widespread in SE Asia, Philippines, New Guinea, Australia.

Platydema flavopictum Gebien, 1913 (Figs. 46, 79–81)

Studied type-material: Taiwan, Sokutsu, Banshoryo Distr., 7.VI.1912, leg. H. SAUTER, holotype DEI (labelled by GEBIEN as type, subsequently as syntype, sex not examined), 1 paratype DEI (labelled subsequently as syntype).

New material: Taiwan, Fuhosho, III.1909, leg. H. SAUTER, 2 ex. HNHM, 2 ex. MNHUB (det. GEBIEN). – Taiwan, Chip Chip, II.1909, leg. H. SAUTER, 2 ex. MNHUB. – Burma, Carin, Asciuli Chebà, 1200–1300 m, I.1888, leg. L. FEA, 1 ex. DEI. – Burma, Carin Ghecù, 1300–1400 m, II.–III.1888, leg. L. FEA, 1 ex. DEI. – N Thailand, Chiang Mai, Doi Suthep, 16.V.1996, leg. K. MASUMOTO, 1 ♀ CKMT. – N Thailand, Chiang Mai, Doi Pui, 1600–1685 m, 7.–9.V.2004, leg. R. GRIMM, 6 ex. CRGT, 1 ex. SMNS.

Remarks: Antennomeres 6–10 distinctly dilated at the inner side (Fig. 80), see discussion about the species characters in chapter 2.

Distribution: Taiwan, Burma, Thailand.

Platydema flavosericeum Kaszab, 1980 (Figs. 37, 67–69)

Studied type-material: Sri Lanka, 6.XII.1881–16.I.1882, leg. G. LEWIS, 1 ♂, 1 ♀ paratypes HNHM.

New material: Sri Lanka, Hagalagaro, 2.VII.1983, leg. O. MEHL, 1 ♂ HNHM (*P. flavosericeum* det. KASZAB).

Distribution: Sri Lanka.

Platydema fumosum Lewis, 1894 (Figs. 4, 70–72)

New material: SE China, Fukien (= Fujian), Kuatun, 2.–10.X.1946, leg. TSUNG-SEN., 70 ex. HNHM (*P. velutinum* det. KASZAB). – NW China, Tienmushan, REITTER, 1 ex. HNHM. – China, E Hubei, Dabie Shan, Wujiashan Forest Park, 17.–18.VI.2003, leg. J. TURNA, 8 ex. CJTK, 4 ex. SMNS.

Remarks: The general shape of the aedeagi of the small dull-blackish species *P. fumosum* (widespread), *P. tricuspis* (widespread) and *P. velutinum* (Sri Lanka) are different from the general shape in the numerous other congeners, because the joint parameres are not distinctly separated from the basal piece (Figs. 72, 189, 198). Although these aedeagi are more or less identical, I consider these three taxa further on as valid species, because a more detailed investigation including the reexamination of all old types is necessary but not possible for me at present in the frame of this paper. *Platydema tricuspis* can easily be recognized among the small dull-blackish congeners because the male head bears a distinct armature which is lacking in *P. fumosum* and *P. velutinum*. KASZAB (1954) recorded the "subspecies" *formosanum* Gebien, 1925 from Fujian. MASUMOTO & MAKIHARA (1997) recorded *Platydema fumosum* from Sumatra, but the given body length of 9.1 mm (fig. 13 in that paper) does not fit to *P. fumosum*, but very probably to *P. detersum*.

Distribution: Japan, Taiwan ("ssp." *formosanum* Gebien, 1925), Korea, China.

Platydema ganesha Schawaller, 2003

Remarks: Described and figured by SCHAWALLER (2003).

Distribution: Himalayas.

Platydema haemorrhoidale Gebien, 1913

Studied type-material: Taiwan, Hoozan, IX.1910, leg. H Sauter, ♂ holotype DEI (labelled as type), 7 paratypes (labelled subsequently as syntypes).

New material: China, Fujian, Kwangtsch, without further data, leg. J. Klapperich, 1 ex. HNHM. – Taiwan, Kaohsiung County, Shanping Forest Recreation Area, near Liukuei, 7.XI.2002, leg. L. Ronkay & O. Merkl, 8 ex. HNHM. – Sumatra, Si-Rambé, XII.1890–III.1891, leg. E. Modigliani, 1 ex. DEI (*P. recticorne* det. Kaszab).

Remarks: Described and figured by Schawaller (2003), recorded already from Fujian by Kaszab (1954).

Distribution: SE China (Fujian), Nepal, Vietnam, Sumatra, Taiwan.

Platydema higonium Lewis, 1894

Remarks: Recorded by Kaszab (1954) from the Chinese province Fujian, but I have some doubts about the correct identification, probably this note refers to *Platydema parachalceum* Masumoto, 1982 known from Fujian.

Distribution: Japan.

Platydema indicum Gebien, 1940 (Figs. 29, 73–75)

Basides ruficolle Motschulsky, 1873 (homonym of *B. ruficolle* Laporte & Brullé, 1831).

New material: N Vietnam, 50 km NE Tschai-Ngueh, 300 m, 4.II.1963, leg. G. Kabakov, 1 ex. HNHM (det. Kaszab). – N Thailand, Chiang Mai, Doi Pui, 1000–1600 m, 9.V.1996, leg. S. Bečvář, 8 ex. CSBC, 3 ex. SMNS. – N Thailand, Chiang Mai, Doi Suthep, 1200–1300 m, 16.IV.2004, leg. W. Schawaller, 3 ex. SMNS. – N Thailand, Chiang Mai, Doi Suthep, 1200 m, 7.–10.V.2004, leg. R. Grimm, 3 ex. CRGT. – Thailand, Phuping Palace, 1.V.1990, leg. M. Itoh, 1 ex. CKAO. – Malaysia, NP Taman Negara, 15.–20.II.1999, leg. Mráček, 1 ex. CSBC.

Remarks: The given type locality "India" probably means Indochina, not India.

Distribution: India (?), Thailand, W Malaysia, Vietnam.

Platydema jacobsoni Gebien, 1927 (Figs. 44, 85–87)

Platydema selatana Masumoto & Makihara, 1997 **n. syn.**

Studied type-material: W Sumatra, Fort de Kock, leg. E. Jacobson, ♂ holotype of *P. jacobsoni* NHMB-F (labelled as type), 1 paratype DEI (labelled as cotype). – S Sumatra, Benakat, 12.VI.1995, leg. H. Makihara, ♂ holotype of *P. selatana* NSMT.

New material: Borneo, Sabah, Kampung Takala, Kinabatangan River, 5.VI.1998, leg. J. Kodada & F. Čiampor, 28 ex. SMNS, 7 ex. DEI, 1 ex. CRGT. – Borneo, Sabah, Crocker Range, Keningau, Taman Bandukan, 14.VI.1998, leg. J. Kodada & F. Čiampor, 3 ex. SMNS. – Borneo, Sabah, Crocker Range, E Gunung Emas, 700 m, 1.–5.IV.2000, leg. L. Bolm, 3 ex. NHMB. – Borneo, Sabah, Crocker Range, E Gunung Emas, 1650 m, 6.IV.2000, leg. L. Bolm, 2 ex. NHMB. – Borneo, Sabah, Tibow 45 km NE Sapulut, 7.–15.IV.2000, leg. L. Bolm, 1 ex. NHMB. – Borneo, Sabah, Sapulut, 25.IV.1995, leg. F. Hozyak, 3 ex. NHMB. – Borneo, Sabah, Poring Hot Springs, 500 m, 8.V.1987, leg. I. Löbl & D. Burckhardt, 4 ex. MHNG, 1 ex. SMNS. – Borneo, Sabah, Keningau, Kimanis Road, 1.–2.V.1991, leg. T. Hatayama, 7 ex. CKMT. – Borneo, Sarawak, Sebadai Park, 9 km SW Kapit, 50 m, 20.V.1994, leg. I. Löbl & D. Burckhardt, 4 ex. MHNG, 1 ex. SMNS. – Borneo, W Kalimantan, Nanga Ela, Nanga Nyuruh, 700 m, 4.–10.VIII.1993, leg. J. Schneider, 1 ex. CSBC. – W Sumatra, Bukit Laweang, 10.–16.IV.1996, leg. S. Bečvář, 2 ♀♀ CSBC. – Sumatra, Aceh, Leuser NP, Ketambe, 450 m, 26.II.–1.III.1991, leg. L. Bocák & M. Bocáková, 1 ♀ SMNS. – S Sumatra, Lampung Prov., Bukit Barisan Selatan NP, 5 km SW Liwa, 600 m, 7.–17.II.2000, leg. J. Bezděk, 2 ex. SMNS. – Sumatra, Prov. Aceh-Selatan, Babahrot, 100 m, 8.–13.VIII.1983, leg. J. Klapperich, 10 ex. HNHM. – Mentawei, Si Oban, IV.–VIII.1894, leg. E. Modigliani, 3 ex. DEI. – Malaysia, Lenggong, 13.III.1974, leg. Y. Kiyoyama, 1 ex. CKAO. – W Malaysia, Cameron Highland, 24.–25.III.1974, leg. Y. Kiyoyama, 3 ex. CKAO. – W Malaysia, Benom Mts., 15 km E Kam-

pong Dong, 700 m, 1.IV.1998, leg. L. DEMBICKÝ & P. PACHOLÁTKO, 1 ex. NHMB. – W Malaysia, Tioman Island, Kampong Tekek – K. Juara, 400 m, 9.III.1998, leg. L. DEMBICKÝ & P. PACHOLÁTKO, 1 ex. CSBC. – W Malaysia, Tioman Island, W Mt. Kajang, 23.–25.II.1998, leg. S. BEČVÁŘ, 3 ex. CSBC. – Malaysia, Pahang, Tioman Island, Kampung Tekek, 15.–24.VII.1993, leg. R. SCHUH, 1 ex. SMNS. – Malaysia, Kedah, Gunung Jerai, 100–500 m, 8.VIII.1993, leg. R. SCHUH, 4 ex. CRSW. – S Thailand, Yala Distr., Betong, Gunung Cang Dun, 25.III.–22.IV.1993, leg. J. HORÁK, 1 ex. CSBC.

Synonymy: When describing *Platydema selatana* from Sumatra, MASUMOTO & MAKIHARA (1997) pointed out its isolated position within the genus because of the dorsal colour pattern, but the given photograph shows the characteristic colour pattern of *P. jacobsoni* Gebien, 1927. Additionally, both studied types have the same asymmetrical horns on the male head, besides other identical external characters. Thus, *P. selatana*, Masumoto & Makihara, 1997 is considered as a junior synonym of *P. jacobsoni* Gebien, 1927.

Distribution: W Malaysia, S Thailand, Sumatra (type localities of *P. jacobsoni* and *P. selatana*), Mentawei, Borneo.

Platydema javanicum Gebien, 1925 (Figs. 26, 88–90)

Studied type-material: Java, Pengalengan, 4000 ft., 1893, leg. H. FRUHSTORFER, ♂ holotype NHMB-F (labelled as type), 2 paratypes DEI (labelled as cotypes).

New material: Malaysia, Cameron Highlands, Gunung Beremban, 1.–3.IV.1990, leg. A. RIEDEL, 2 ex. SMNS. – Malaysia, Tanah Rata, 30.V.1975, leg. Y. KIYOYAMA, 4 ex. CKAO. – Malaysia, Pahang, Cameron Highlands, Tanah Rata, Gunung Jasar, 12.–15.II.1998, leg. S. BEČVÁŘ, 5 ex. CSBC. – Malaysia, Pahang, Cameron Highlands, Tanah Rata, Gunung Jasar, 19.–25.VI.1995, leg. S. BEČVÁŘ, 2 ex. SMNS. – Sumatra, Jambi, Gunung Kerinci, 1800–2100 m, 6.–7.III.1991, leg. L. BOCÁK & M. BOCÁKOVÁ, 3 ex. NHMB, 1 ex. SMNS.

Remarks: Not conspecific with *Platydema javanum* Kaszab, 1939 from the same type locality.

Distribution: Java (type localities), Sumatra, W Malaysia.

Platydema javanum Kaszab, 1939 (Figs. 18, 97–99)

Studied type-material: W Java, Pengalengan, 4000 ft., 1893, leg. H. FRUHSTORFER, ♀ holotype DEI.

New material: Sumatra, Gunung Talamau (Ophir Mts.), 17 km E Simpangempat, 750 m, 21.–25.V.2001, leg. L. BOLM, 2 ex. SMNS. – W Sumatra, Bengkulu Prov., near Curup, Bukit Kaba Mt., 1000–1500 m, 30.I.–3.II.2000, leg. J. BEZDĚK, 2 ex. SMNS. – W Malaysia, Pahang, Cameron Highlands, Gunung Beremban, 1600 m, 18.–19.I.1995, leg. S. BEČVÁŘ, 1 ex CSBC.

Remarks: The dorsal colour pattern and other external characters of the series from Sumatra agree with the female holotype from Java, and I consider conspecifity though the aedeagi could not be compared. The widespread *Platydema waterhousei* is very similar in the dorsal colour pattern, but apart from a different aedeagus in *P. javanum* the frons between the eyes is quite broad (Fig. 97) and in *P. waterhousei* the frons is distinctly narrower (Fig. 190). See also remarks under *P. perpolitum*. *Platydema javanum* Kaszab, 1939 is not conspecific with *P. javanicum* Gebien, 1925 from the same type locality.

Distribution: Java (type locality), Sumatra, W Malaysia.

Platydema koreanum Chûjô, 1992

Remarks: Not yet known from continental China. The species is said to be

closely related to *Platydema nigroaeneum* Motschulsky, 1860 from Japan with longer and thicker horns on the male head, with the dorsal punctation somewhat larger and denser and with the elytral intervals somewhat more convex. Very probably, these differences are not specific.

Distribution: Korea.

Platydema krishna Schawaller, 2003

Remarks: Described and figured by SCHAWALLER (2003).

Distribution: Himalayas.

Platydema kurama Nakane, 1963

Remarks: The original description (NAKANE 1963) is quite poor and contains no figures. This species has a metallic surface, the male with symmetrical horns, body length 6.0–7.2 mm. The main diagnostic character is said to be the relatively broad pronotum. A photograph of this species is given in the catalogue of Korean Tenebrionidae by KIM (2003), showing this striking broad pronotum. Not yet known from continental China.

Distribution: Japan, Korea.

Platydema lewisi Kaszab, 1980 (Figs. 23, 94–96)

Studied type-material: Sri Lanka, 1910, G. LEWIS, 1 ♂, 1 ♀ paratypes HNHM.

New material: S India, Orissa, Jajpur-Keonjahr Distr., Daitari, 25.XI.–4.XII.1967, leg. G. TOPÁL, 2 ♀♀ HNHM. – India or., Shembagamur, 1 ♀ HNHM.

Remarks: Without reexamining the ♀ holotype of *Platydema capreolum* (Chevrolat, 1877) and the probably conspecific male described one year later (CHEVROLAT 1878) it is impossible to decide, whether *P. lewisi* is a distinct species or a synonym of *P. capreolum*. KASZAB (1980) mentioned as difference only the denser punctation on pronotum and elytral intervals in *P. capreolum*. The material published as *P. capreolum* earlier (SCHAWALLER 2003) and in this contribution possesses the same fine and sparse punctation as the specimens listed here under *P. lewisi*.

Distribution: Sri Lanka, S India.

Platydema longivittis Gebien, 1927 (Figs. 30, 100–102)

Studied type-material: W Sumatra, Fort de Kock, 920 m, 1925, leg. C. JACOBSON, ♂ holotype NHMB-F (labelled as type), 1 ♂ paratype BMNH (labelled as cotype).

New material: Sumatra, Gunung Talamau, 17 km E Simpangempat, 750 m, 21.–25.V.2001, leg. L. BOLM, 1 ex. NHMB, 1 ex. SMNS.

Remarks: The head of the female is not unarmed but has an armature similar to the male, but less developed.

Distribution: Sumatra.

Platydema lynceum Lewis, 1894

Remarks: Not yet known from continental China. *Platydema ussurianum* Kaszab, 1977 from eastern Siberia may be a different species or a junior synonym of this species.

Distribution: Japan, Korea.

Platydema maculicolle Laporte & Brullé, 1831 (Figs. 3, 103–105)

New material: Java, 2 ex. HNHM. – Java, Hist. Coll. No. 46249, 6 ex. MNHUB. – W Java, Pengalangan, 4000 ft., 1893, leg. H. FRUHSTORFER, 3 ex. DEI.

Remarks: Middle tibia of males strongly curved, unusual character within *Platydema*.

Distribution: Java.

Platydema marseuli Lewis, 1894 (Figs. 21, 106–108)

Platydema benakatensis Masumoto & Makihara, 1997 **n. syn.**

Studied type-material: S Sumatra, Benakat, 5.VI.1995, leg. H. MAKIHARA, ♂ holotype of *P. benakatensis* NSMT.

New material: Japan, Ehime Pref., Matsuyama, 18.VI.1995, leg. H. KAN, 2 ex. SMNS. – China, S Yunnan, Mengyang NR, 500 m, 12.IX.1994, leg. S. KURBATOV, 1 ex. HNHM. – N Vietnam, Tam Dao, 900 m, 27.V.–2.VI.1986, leg. A. OLEXA, 2 ex. NHMB, 1 ex. SMNS. – N Vietnam, Cuc Phuong, 2.–11.V.1991, leg. J. STRNAD, 1 ex. NHMB. – Vietnam, Tuyen Quang Prov., 3 km SE Pac Ban, Na Hang NR, 380 m, 22.–26.II.1997, leg. G. CSORBA, 5 ex. HNHM. – Laos, Bolikhamsai Prov., 8 km NE Ban Nape, 600 m, 1.–18.V.2001, leg. V. KUBÁŇ, 2 ex. NHMB. – N Laos, Viang Chan Prov., Vangvieng N Vientiane, 14.–16.V.1997, leg. S. BEČVÁŘ, 24 ex. CSBC, 3 ex. SMNS. – Malaysia, Porlis-Langkawi, Datai, 12.III.1995, leg. E. HEISS, 1 ex. CRGT. – Malaysia, Perak, Banjaran Bintang, Bukit Berapit (Taiping), 20.–23.II.1997, leg. I. JENIŠ, 1 ex. CSBC. – Malaysia, Pahang, Baniaran Benom Mts., 10–15 km SE K. Ulo Dona, 17.–23.IV.1997, leg. D. HAUCK, 1 ex. CSBC. – Thailand, Khao Yai NP, 750–850 m, 26.XI.–3.XII.1985, leg. D. BURCKHARDT & I. LÖBL, 2 ex. MHNG, 1 ex. SMNS. – Thailand, Chiang Mai, Doi Suthep, 1050 m, 5.XI.1985, leg. D. BURCKHARDT & I. LÖBL, 1 ex. MHNG. – Thailand, Prov. Chiang Mai, W Mae Malai, Pa Pae, 26.IV.2004, leg. R. GRIMM, 1 ex. CRGT. – W Thailand, Klong Lan NP, 50 km SW Kamphaeng Phet, 2.–5.VII.1997, leg. J. REJSEK, 3 ex. SMNS. – Thailand, Chiang Mai, NE Mae Taeng, Pong Deud Hot Springs, 20.IV.2003, leg. R. GRIMM, 1 ex. CRGT. – S Thailand, Phang Nga Prov., Ko Phuket-Surin, 30.–31.III.2002, leg. E. HEISS, 2 ex. CRGT. – Thailand, Ranong Prov., Ranong Hot Springs, 23.–27.II.1996, leg. P. PRŮDEK, 1 ex. CSBC. – Burma, Bhamò, 15.VIII.1885, leg. L. FEA, 1 ex. DEI. – S India, Madras, Anaimalai Hills, Valparai, 1100 m, 20.XI.1972, leg. C. BESUCHET, I. LÖBL & R. MUSSARD, 1 ex. MHNG. – S India, Kerala, Cardamon Hills, 5 km S Kumily, 1000 m, 6.XI.1972, leg. C. BESUCHET, I. LÖBL & R. MUSSARD, 1 ex. MHNG. – S India, Kerala, Thekkady, Periyar Lake, 900–1000 m, 19.–27.IV.1997, leg. L. DEMBICKÝ & P. PACHOLÁTKO, 1 ex. NHMB. – Sri Lanka, Pusselawa, 9.VII.1979, leg. E. HEISS, 1 ex. CRGT. – Sri Lanka, Kandy, Udawattekele Sanctuary, 600 m, 24.XII.2000, leg. R. SCHUH, 1 ex. CSBC. – Borneo, Sabah, Sepilok, 18.VII.1999, leg. M. HAUSER, 1 ex. SMNS. – Borneo, Sabah, Crocker Range, W Apin Apin, V.1999, leg. M. SNIŽEK, 2 ex. CMLS. – N Sumatra, Medan, Bukit Lawang, 11.–12.X.1990, leg. A. RIEDEL, 5 ex. SMNS. – Sumatra, Prov. Aceh-Selatan, Babahrot, 100 m, 8.–13.VIII.1983, leg. J. KLAPPERICH, 3 ex. HNHM. – NE Sumatra, Tebing-tinggi, leg. SCHULTHEISS, 1 ex. DEI. – W Sumatra, Bengkulu Prov., near Curup, Bukit Kaba Mt., 1000–1500 m, 30.I.–3.II.2000, leg. J. BEZDĚK, 1 ex. SMNS. – Bali, Danau Buyan, 1300 m, 19.–21.II.1994, leg. L. BOLM, 3 ex. SMNS. – Central Sulawesi, W Lake Poso, Taipa, 10.–11.IV.1999, leg. S. BEČVÁŘ & P. ZÁBRANSKÝ, 2 ex. CSBC, 1 ex. SMNS. – Philippines, Isl. Leyte, X.1915, leg. S. BÖTTCHER, 12 ex. MNHUB, 2 ex. SMNS. – Philippines, Luzon, Manila, X.1913, leg. S. BÖTTCHER, 3 ex. MNHUB. – Philippines, Panay, 10 km E Sibalom, 100 m, 10.XII.1990, leg. L. BOLM, 2 ex. NHMB, 1 ex. SMNS.

Synonymy: The holotype of *Platydema benakatensis* shows no distinct specific differences of the external characters and of the aedeagus to the widespread and somewhat variable *P. marseuli*. The horns of the male head are relatively long in the holotype of *P. benakatensis* but this fits in the range of the infraspecific variation of *P. marseuli*. Thus, *P. benakatensis* Masumoto & Makihara, 1997 is considered as a junior synonym of *P. marseuli* Lewis, 1894.

Remarks: Most females bear a reduced armature on the head, but in a few females this armature is completely lacking.

Distribution: Widespread in SE Asia, Japan, Taiwan, Philippines.

Platydema monoceros Gebien, 1925 (Figs. 11, 118–120)

Platydema tetraspilotum Chevrolat, 1878 (homonym of *P. tetraspilotum* Hope, 1842).

New material: Malaysia, Johor, NW Kota Tinggi, 2.II.1994, leg. R. Grimm & A. Rachinsky, 1 ex. CRGT. – Malaysia, Johor, Endau-Rompin, Pulau Jasin, 50–400 m, 19.III.1998, leg. L. Dembický & P. Pacholátko, 1 ♀ NHMB. – Malaysia, Selangor, Hutan Kanching, 20 km N Kuala Lumpur, 16.VIII.1993, leg. R. Schuh, 1 ex. CRSW. – Malaysia, Kedah, Gunung Jerai, 100–500 m, 8.VIII.1993, leg. R. Schuh, 1 ♀ CSBC. – Malaysia, Kedah, Kampung Merbok, 20 km NW Sungai Petani, 9.VIII.1993, leg. R. Schuh, 1 ex. CRSW. – Malaysia, Tapah, 23.II.1974, leg. Y. Kiyoyama, 1 ex. CKAO. – Malaysia, Lenggong, 12.III.1974, leg. Y. Kiyoyama, 1 ♂ CKAO. – Singapore, Botanical Garden, 17.III.1974, leg. Y. Kiyoyama, 1 ♀ CKAO. – Thailand, Phuket Island, Surin, 13.–20.II.1998 and 18.II.1999, leg. E. Heiss, 5 ex. CRGT. – Borneo, Sabah, Poring Hot Springs, 500–600 m, 6.–9.V.1987, leg. D. Burckhardt & I. Löbl, 2 ex. MHNG. – Borneo, Sabah, Tibow 45 km NE Sapulut, 600–900 m, 7.–15.IV.2000, leg. L. Bolm, 1 ♂ NHMB. – Borneo, Sabah, Sepilok, 5.–11. VIII.1983, leg. Y. Notsu, 1 ♂ CKAO. – Borneo, Sabah, Keningau, 10.–20.X.1988, leg. M. Itoh, 5 ex. CKAO. – Borneo, Sabah, Bunsit, 30.VII.1985, 1 ex. CKMT. – Borneo, Sarawak, Sebadai Park, 9 km SW Kapit, 50 m, 20.V.1994, leg. I. Löbl & D. Burckhardt, 2 ex. MHNG. – Borneo, Sarawak, Kapit Distr., Sebong, Baleh River, 9.–21.III.1993, leg. S. Bílý, 1 ♀ CSBC. – Borneo, Brunei, Temburong, Kuala Belalong, 60–300 m, 16.–20.IV.1993, leg. E. Heiss, 2 ex. CRGT. – S Sumatra, Lampung Prov., Bukit Barisan Selatan NP, 5 km SW Liwa, 600 m, 7.–17.II.2000, leg. J. Bezděk, 5 ex. SMNS. – Sumatra, Prov. Aceh-Selatan, Babahrot, 100 m, 15.–20.VIII.1983, leg. J. Klapperich, 2 ex. HNHM. – Mentawei, Si Oban, IV.–VIII.1894, leg. E. Modigliani, 8 ex. DEI. – Lombok, Sapit-Sembalun Bumbung, 900–1500 m, 14.–16.II.1994, leg. L. Bolm, 10 ex. SMNS. – Lombok, Sabito, 29.–30.IV.1986, leg. M. Nishikawa, 7 ex. CKMT.

Remarks: Gebien's "plesiotype" of *P. monoceros* n. nom. has been studied (Mentawei, Si-Oban, leg. E. Modigliani, 1 ♂, NHMB-F). Further remarks under *P. ribbei* from Sulawesi, which is probably conspecific.

Distribution: W Malaysia, Singapore, Thailand, Borneo, Sumatra, Mentawei, Lombok.

Platydema nigroaeneum Motschulsky, 1860

Remarks: Not yet known from continental China.

Distribution: Japan, Korea.

Platydema nuciferae Blair, 1928 (Figs. 51, 133–135)

Studied type-material: Malaysia, Sepang, 9.X.1927, leg. G. H. Corbett, holotype BMNH (labelled as type, sex not examined).

New material: Malaysia, Sepang, 2.IX.1927 and 26.XI.1927, leg. G. H. Corbett, 2 ex. BMNH. – Malaysia, Johor, Endau River, Selendang, 29.IV.–6.V.1993, leg. I. Jeniš & M. Štrba, 1 ex. CSBC. – S Vietnam, Vung Tau, 28.–30.XI.1988, leg. S. Bečvář, 1 ex. CSBC. – Thailand, Chumphon Prov., Pha To, 1.–11.V.1998, leg. P. Průdek & R. Šigut, 1 ex. SMNS. – British Solomons, XII.1931, leg. R. J. A. W. Lever, 2 ex. BMNH. – Riouw Arch., Doerian, leg. Dammerman, VI.1923, 1 ex. BMNH. – Solomon Islands, Guadalcanal, Kukum, VI.–XII.1963, leg. P. Greenslade, 2 ex. BMNH, 1 ex. SMNS.

Remarks: The series from Sepang has been collected in coconut inflorescences, thus the wide distribution of this species might be caused by coconut dispersal.

Distribution: W Malaysia, Sundas, Solomon Islands.

Platydema orientalis Gebien, 1911 (Figs. 25, 124–126)

Oplocephala ferruginea Motschulsky, 1873 (homonym of *P. ferruginea* LeConte, 1866).

New material: N Thailand, Chiang Mai, Doi Suthep, 1200 m, 30.V.1999, 21.XI.2001, 6.–8.XII.2001 and 27.IV.–10.V.2004, leg. R. Grimm, 36 ex. CRGT, 2 ex. SMNS. – N Thailand, Chiang Mai, Doi Suthep Pui, 1300–1500 m, 18.–23.IV.1991, leg. P. Pacholátko, 8 ex. NHMB, 2 ex. SMNS. – Thailand, Khao Yai NR, 19.–21.IV.1996, leg. S. Bečvář, 2 ex. CSBC. – Vietnam, Buen Loi, 10.VI.1982, leg. L. Medvedev, 1 ex. HNHM. – N Vietnam, Tam Dao, 1.–8.VIII.1998, leg. N. Kanie, 1 ex. CKAO. – N Vietnam, Tam Dao, 900 m, 13.–24.V.1989, leg. A. Olexa, 1 ex. NHMB. – N Vietnam, Thuong tiem Distr., Kim Boi, 60 km SW Hoa Binh, 1.–5.XI.1978, leg. L. Medvedev, 1 ex. HNHM.

Distribution: Thailand, Burma, Vietnam.

Platydema pallidicolle Lewis, 1894 (Figs. 16, 136–138)

New material: India, Madras, Cardamon Hills, 2 km NE Kumily, 900 m, 4.XI.1972, leg. C. Besuchet, I. Löbl & R. Mussard, 1 ex. MHNG (*P. pallidicolle* det. Kaszab). – S India, Kerala, Cardamon Hills, 10 km SW Munnar, 1000 m, 5.–17.XII.1993, leg. D. Boukal & Z. Kejval, 2 ex. CSBC. – Malaysia, Cameron Highland, 24.III.1975, leg. Y. Kiyoyama, 2 ex. CKAO. – W Malaysia, Pahang, Fraser's Hill, 1000 m, 30.I.1999, leg. S. Kurbatov, 1 ex. HNHM. – Malaysia, Kedah, Gunung Jerai, 100–500 m, 8.VIII.1993, leg. R. Schuh, 2 ex. CRSW. – Malaysia, Benom Mts., 15 km E Kampong Dong, 700 m, 1.IV.1998, leg. P. Pacholátko & L. Dembický, 1 ex. NHMB. – Thailand, Cumphon Prov., Pha To, 27.III.–14.IV.1996, leg. K. Majer, 1 ex. SMNS. – Thailand, Ranong Prov., Ban Na, 22.–26.III.1996, leg. P. Průdek, 1 ex. CSBC. – S Vietnam, My Tho, 1.XII.1988, leg. S. Bečvář, 1 ex. CSBC. – S Vietnam, 40 km NW An Khe, Buon Luoi, 28.–30.V.1996, leg. P. Pacholátko & L. Dembický, 1 ex. NHMB. – Borneo, Sarawak, Kuching, Bako NP, 27.–29.III1990, leg. A. Riedel, 2 ex. SMNS. – Borneo, Sarawak, Sebadai Park, 9 km SW Kapit, 50 m, 20.V.1994, leg. I. Löbl & D. Burckhardt, 1 ex. MHNG. – Borneo, Sabah, Kampung Takala, Kinabatangan River, 5.VI.1998, leg. J. Kodada & F. Čiampor, 15 ex. SMNS, 2 ex. CRGT. – Borneo, Sabah, Poring Hot Springs, 550–600 m, 9.V.1987, leg. D. Burckhardt & I. Löbl, 1 ex. MHNG. – Sumatra, Prov. Aceh-Selatan, Babahrot, 100 m, 28.–30.VII.1983, leg. J. Klapperich, 2 ex. HNHM. – Mentawei, Si Oban, IV.–VIII.1894, leg. E. Modigliani, 4 ex. DEI. – W Bali, E Negara, 10 km N Yembrana, 26.VIII.1997, leg. J. Scheuern, 2 ex. SMNS. – Bali, Danau Buyan, 1300 m, 19.–21.II.1994, leg. L. Bolm, 1 ex. SMNS. – Nias, eastern coast, Lawalo, 26.IX.1979, leg. D. Erber, 3 ex. SMNS (*P. pallidicolle* det. Kaszab). – Central Sulawesi, 17 km E Pendolo, 800 m, 4.–9.VII.1999, leg. L. Bolm, 3 ex. SMNS. – NE Sumbawa, Calabai, Tambona NP, 11.–13.II.1994, leg. L. Bolm, 1 ex. SMNS. – Lombok, Sapit-Sembalun Bumbung, 900–1500 m, 14.–16.II.1994, leg. L. Bolm, 2 ex. SMNS. – Lombok, Sembalun Lewang, Mt. Rinjani, 1700 m, 6.–8.II.1994, leg. L. Bolm, 1 ex. SMNS. – Lombok, Sabito, 29.–30.IV.1986, leg. M. Nishikawa, 28 ex. CKMT. – Maluku, Halmahera, Buli, Maba, 8.XI.1999, leg. A. Riedel, 2 ex. SMNS. – Philippines, N Palawan, Binaluan, XI./XII.1913, 1 ex. HNHM (*P. pallidicolle* det. Gebien). – Philippines, Palawan, Port Barton, 150 m, 14.–18.XII.1990, leg. L. Bolm, 18 ex. NHMB. – Philippines, Mindanao, 30 km NW Maramag, Bagongsilang, 1700 m, 13.–17.V.1996, leg. L. Bolm, 7 ex. SMNS. – Philippines, Imugan, no date, leg. Böttcher, 2 ex. MNHUB. – Taiwan, Ilan County, Fushan Botanical Garden, 8.–11.IV.2002, leg. O. Merkl, 2 ex. HNHM. – Taiwan, Hoozan, IX.1910, leg. H. Sauter, 3 ex. DEI.

Remarks: The material from the Fushan Botanical Garden in Taiwan was collected from the fungus *Rigidoporus ulmarius*, according to the label.

Distribution: Widespread in SE Asia, Japan, Taiwan, Philippines.

Platydema parachalceum Masumoto, 1982

Platydema zoltani Masumoto, 1985 **n. syn.**

New material: Taiwan, Nantou County, Kao-Leng Dyi, 18 km W Wushe, 2074 m, 18.–19.IV.2002, leg. D. A. Anstine, G. Fábián & O. Merkl, 11 ex. HNHM, 1 ex. SMNS (*P. parachalceum* det. Masumoto). – Taiwan, Ilan County, Fushan Botanical Garden,

8.–11.IV.2002, leg. O. MERKL, 1 ex. HNHM (*P. parachalceum* det. MASUMOTO). – China, NE Guizhou, 20 km NW Jiangkou, Fanjing Shan, Kuaichang, 27.V.–3.VI.1995, leg. E. JENDEK & O. ŠAUŠA, 1 ♂ CSBC. – China, Shaanxi, Quinlingshan, Zhouzhi-Foping, 2000 m, 1.VII.2002, leg. STARY, 1 ♂ SMNS. – China, SE Hubei, Mufu Shan, Jiugongshan Forest Park, 1000 m, 3.–5. and 18.VI.2002, leg. J. TURNA, 1 ♀ CJTK.

Synonymy: The species has been described and figured by SCHAWALLER (2003) under *Platydema zoltani*. I could compare type-material of *P. zoltani* and the above listed series of *P. parachalceum*, identified by MASUMOTO, and found no differences, thus *P. zoltani* Masumoto, 1985 is considered as a junior synonym of *P. parachalceum* Masumoto, 1982.

Distribution: Taiwan (type locality of *P. parachalceum*), China (type locality Fujian of *P. zoltani*, Shaanxi, Hubei, Guizhou).

Platydema pentaphylloides Kaszab, 1980 (Figs. 42, 127–129)

Studied type-material: Vietnam, Cuc Phuong, Ninh binh, 3.–10.V.1966, leg. G. TOPÁL, ♀ holotype HNHM.

New material: Vietnam, Dong-Nai, Ma-Da forest, 14.VI.1995, leg. T. SERGEEVA, 7 ex. HNHM (det. O. MERKL). – Thailand, Phang Nga Prov., Tone Chong-Fah Waterfall, 20 km S Takuapa, 100–200 m, 11.–14.I.1996, leg. A. SCHULZ & K. VOCK, 1 ex. SMNS. – Thailand, Khao Lak NP, Thone Chong Fa Fall, 100–300 m, 6.–15.I.1998, leg. A. SCHULZ & K. VOCK, 2 ex. SMNS. – Thailand, Ko Chang Island, western side, 1999, leg. A. SCHULZ & K. VOCK, 7 ex. SMNS. – Malaysia, Lake Kenyir, 5 km SW Dam, 50 km SW Kuala Terengganu, 350 m, 7.–12.VII.2001, leg. A. SCHOLZ & K. VOCK, 2 ex. SMNS. – E Sumatra, Lampung Prov., Bukit Barisan Selatan NP, 5 km SW Liwa, 600 m, 7.–17.II.2000, leg. D. HAUCK, 1 ♀ SMNS.

Remarks: The female from Sumatra has the elytral rows with finer punctures than the other males and females from continental SE Asia, thus its identification remains somewhat doubtful.

Distribution: Vietnam (type locality), Thailand, ?Sumatra.

Platydema perpolitum Gebien, 1925 (Figs. 19, 142–144)

Studied type-material: Java, Bogares Tegal, VII.1889, leg. T. F. LUCASSEN, 1 ♀ paratype NHMB-F (labelled as cotype), 1 ♀ paratype HNHM (labelled as cotype).

New material: S Sumatra, Lampung Prov., Bukit Barisan Selatan NP, 5 km SW Liwa, 600 m, 7.–17.II.2000, leg. J. BEZDĚK, 9 ex. SMNS. – E Sumatra, Riau Prov., Bukit Tigapuluh NP, 18.–25.I.2000, leg. J. BEZDĚK, 1 ex. SMNS. – Borneo, Sabah, Tibow, 45 km NE Sapulut, 600–900 m, 7.–15.IV.2000, leg. L. BOLM, 8 ex. NHMB, 4 ex. CSBC, 4 ex. SMNS. – Borneo, Sarawak, Sebadai Park, 9 km SW Kapit, 50 m, 20.V.1994, leg. I. LÖBL & D. BURCKHARDT, 3 ex. MHNG. – Central Sulawesi, 17 km E Pendolo, 800 m, 4.–9.VII.1999, leg. L. BOLM, 2 ex. SMNS. – Central Sulawesi, 20 km SE Tambarana, Camp Mauro, 11.–16.VII.1999, leg. L. BOLM, 2 ex. SMNS. – S Thailand, Yala Distr., Betong Gunung, Cang Dun, 25.III.–22.IV.1993, leg. J. HORÁK, 1 ex. CSBC, 1 ex. SMNS. – W Malaysia, Johor, Endau-Rompin, Pulau Jasin, 50–400 m, 19.III.1998, leg. L. DEMBICKÝ & P. PACHOLÁTKO, 11 ex. NHMB, 4 ex. SMNS. – W Malaysia, Cameron Highlands, 24.III.1975, leg. Y. KIYOYAMA, 1 ex. CKAO.

Remarks: The dorsal colour pattern and other external characters of the above listed specimens coincide with the available female paratypes from Java, thus I consider conspecifity although the aedeagi could not be compared (and although the shape of the antennomeres seem to be somewhat different). Very similar in the dorsal colour pattern is the widespread *Platydema waterhousei*, but apart from a different aedeagus the frons between the eyes is somewhat broader in *P. perpolitum* (Figs. 142, 190) and the dorsal surface is distinctly shining (dull in *P. waterhousei*). See also remarks under *P. javanum*.

Distribution: Java (type locality), Sumatra, Borneo, Sulawesi, W Malaysia, S Thailand.

Platydema pictipenne Gebien, 1925

Remarks: Described and figured by SCHAWALLER (2003).
Distribution: S India.

Platydema planum Gebien, 1914 (Figs. 15, 139–141)

Platydema pilosiventre Gebien, 1925 **n. syn.**

Studied type-material: Banguey, near Borneo, ♂ holotype of *P. planum* NHMB-F (labelled as type), 2 paratypes of *P. planum* HNHM (labelled as syntypes). – Mentawei, Si Oban, IV.–VIII.1894, leg. E. MODIGLIANI, ♂ paratype of *P. pilosiventre* NHMB-F (labelled as cotype), 1 paratype of *P. pilosiventre* DEI (labelled as cotype).

New material: Borneo, Sarawak, Kuching, Santubong, 8.–9.III.1990, leg. A. RIEDEL, 4 ex. SMNS. – Borneo, Sabah, near Bunsit, 29.VII.1985, leg. M. NISHIKAWA, 1 ex. CKMT. – Borneo, Sabah, Tibow, 45 km NE Sapulut, 600–900 m, 7.–15.IV.2000, leg. L. BOLM, 1 ex. NHMB. – NE Sumatra, Tebing-tinggi, leg. SCHULTHEISS, 1 ex. DEI. – Philippines, Palawan, Port Barton, 150 m, 14.–18.XII.1990, leg. L. BOLM, 1 ex. SMNS. – Malaysia, Ulu Bendol, 21.III.1978, leg. Y. KIYOYAMA, 1 ex. CKAO. – W Malaysia, Pahang, Kuala-Rompin, 13.–16.III.1995, leg. M. ŠTRBA & R. HERGOVITS, 1 ex. SMNS. – W Malaysia, Perak, Kg. Bukit Berapit, SE Taiping, 18.–19.II.1998, leg. S. BEČVÁŘ, 2 ex. CSBC.

Synonymy: GEBIEN (1925) mentioned the following differences: body length (5 mm in *Platydema planum*, 6 mm in *P. pilosiventre*), body shape and shape of the pronotum (narrower in *P. planum*, wider in *P. pilosiventre*) and colour of the abdominal sternites (red in *P. planum*, black in *P. pilosiventre*). When examining types of both nominal taxa, I could find no distinct differences in the body length, in the body shape and in the shape of the aedeagus, in the colour pattern of the elytra and in the colour of the abdominal sternites, thus *P. pilosiventre* Gebien, 1925 is considered as a junior synonym of *P. planum* Gebien, 1914.

Remarks: This species possesses an unusual character within the genus, a longer setation medially on the abdominal sternites I–II in males. The extent of setation is identical in the male types of *P. planum* and *P. pilosiventre*, giving an additional argument for the stated synonymy.

Distribution: Banguey (type locality of *P. planum*), Borneo, Sumatra, Mentawei (type locality of *P. pilosiventre*), Singapore, W Malaysia, Palawan.

Platydema rectum Kaszab, 1982 (Figs. 12, 148–150)

Studied type-material: Tevor Isl., no further dates, 1 ♂ paratype HNHM.
New material: Tevor Isl., no further dates, 1 ex. MNHUB, 1 ex. SMNS.

Remarks: Tevor Island is an unusual older name for Tiworo Island situated SE Sulawesi.

Distribution: Tiworo Island (SE Sulawesi).

Platydema recticorne Lewis, 1894 (Figs. 24, 151–153)

New material: Japan, Nara, 27.–31.VII.1980, leg. C. BESUCHET, 4 ex. MHNG, 1 ex. SMNS. – Japan, Kasuga, Yamato, 10.X.1984, leg. K. ANDO, 2 ex. CKAO, 1 ex. SMNS.

Remarks: Not yet known from continental China or from other Oriental localities. In the DEI collection a specimen from Sumatra is kept, identified by the late

Dr. KASZAB as *P. recticorne*, but this specimen belongs to *P. haemorrhoidale* Gebien, 1913.

Distribution: Japan, Korea.

Platydema ribbei Gebien, 1925 (Figs. 13, 157–159)

Studied type-material: S Sulawesi, Bantimoeroeng, 1883, leg. C. RIBBE, ♂ holotype MNHUB (labelled as ♂ type). – S Sulawesi, Bonthain, 1883, leg. C. RIBBE, 1 ♀ paratype MNHUB.

New material: S Sulawesi, Bontongan, 720 m, 29.XII.1999, leg. K. & M. ANDO, 1 ex. CKAO, 1 ex. SMNS. – S Sulawesi, 20–35 km NW Palopo, 1000–1400 m, 4.–5.IV.1999, leg. S. BEČVÁŘ & P. ZÁBRANSKÝ, 1 ex. CSBC.

Remarks: This species is quite similar to *Platydema monoceros*, concerning the general body shape and size, the armature of the male head and also the aedeagus (Figs. 120, 159); the only difference is a somewhat different colour pattern of the elytra with a narrower anterior transverse band in *P. ribbei* (Figs. 11, 13). The available material from Sulawesi is too poor to decide, whether this is a specific or only an infraspecific variation. An argument for conspecificy may be the allopatric distribution of both taxa (widely in the Oriental region without Sulawesi: *P. monoceros*, only Sulawesi: *P. ribbei*).

Distribution: Sulawesi.

Platydema sauteri Gebien, 1913 (Figs. 9, 163–165)

Studied type-material: Taiwan (Formosa), Kosempo, XI.1908, leg. H. SAUTER, 2 syntypes DEI, 1 ♂ designated herewith as lectotype. – Taiwan, Polisha, XI.1908, leg. H. SAUTER, 1 syntype DEI, designated herewith as paralectotype. – Taiwan, Chip Chip, II.1909, leg. H. SAUTER, 5 syntypes DEI, designated herewith as paralectotypes.

Remarks: Not yet known from continental China.

Distribution: Taiwan (type locality), Ryukyu Islands.

Platydema schultheissi Kaszab, 1939 (Figs. 34, 166–168)

Studied type-material: NE Sumatra, Tebing-tinggi, leg. SCHULTHEISS, ♂ holotype DEI.

New material: Borneo, Sarawak, confluence Sun Oyan and Mujong river E Kapit, 50 m, 18.V.1994, leg. I. LÖBL & D. BURCKHARDT, 1 ex. MHNG. – Borneo, Sarawak, Sebadei Park, 9 km SW Kapit, 50 m, 20.V.1994, leg. I. LÖBL & D. BURCKHARDT, 8 ex. MHNG, 3 ex. SMNS. – Borneo, Sabah, Tibow, 45 km NE Sapolut, 600–900 m, 7.–15.IV.2000, leg. L. BOLM, 8 ex. NHMB, 1 ex. SMNS.

Remarks: The aedeagus of this species is quite unique within the genus, at least among the African and Oriental species, possessing a long and thin aedeagus enveloped by a prominent sclerotized forceps (Fig. 168).

Distribution: Borneo, Sumatra.

Platydema semimetallicum Blair, 1930

Remarks: Described and figured by SCHAWALLER (2003).

Distribution: Himalayas, SE Tibet.

Platydema seminitens (Chevrolat, 1878) (Figs. 47, 169–171)

New material: Borneo, Brunei, STAUDINGER, 3 ex. MNHUB (det. GEBIEN).

Remarks: This series from Brunei has been compared with the types in ZSM (collection HAAG-RUTENBERG) by GEBIEN (GEBIEN 1925b). The male head is quite similar to the head in *Platydema subfascium* Walker, 1858, however the dorsal colour pattern is somewhat different and also the aedeagus (compare figures for *P. subfasciium* in SCHAWALLER 2003). The publication year of the original description is 1878, not 1877.

Distribution: Sulawesi (type locality), Sundas, Philippines.

Platydema sericeoideum Kaszab, 1980 (Figs. 40, 175–177)

Studied type-material: Sri Lanka, G. LEWIS, 1 ♂ paratype HNHM.

New material: Sri Lanka, Ratnapura Distr., 2 km S Hayes, 29.–30.1995, leg. S. BEČVÁŘ & V. KOSTÁL, 4 ex. CSBC, 2 ex. SMNS. – Sri Lanka, Kandy, Udawattekele Sanctuary, 600 m, 24.XII.2000, leg. R. SCHUH, 3 ex. CSBC.

Distribution: Sri Lanka.

Platydema sericeum Gebien, 1914 (Figs. 43, 172–174)

Platydema latemarginatum Gebien, 1927 **n. syn.**

Studied type-material: Sumatra, Fort de Kock, leg. C. JACOBSON, ♂ holotype of *P. latemarginatum* NHMB-F (labelled as type), 2 paratypes of *P. latemarginatum* DEI (labelled as cotypes). – Banguey near Borneo, 1 ♀ paratype of *P. sericeum* HNHM (labelled as cotype).

New material: Nias, eastern coast, Lawalo, 26.IX.1979, leg. D. ERBER, 9 ex. SMNS, 3 ex. HNHM (*P. latemarginatum* det. KASZAB). – Borneo, Sabah, Poring Hot Springs, area below Langanan Fall, 800 m, 11.V.1987, leg. A. SMETANA, 1 ex. MHNG. – Borneo, Sabah, Kampung Takala, Kinabatangan River, 5.VI.1998, leg. J. KODADA & F. ČIAMPOR, 1 ex. SMNS. – Borneo, Sabah, Keningau, Kimanis Road, 1.–2.V.1991, leg. T. HATAYAMA, 2 ex. CKMT. – Borneo, Sarawak, Sebadai Park, 9 km SW Kapit, 50 m, 20.V.1994, leg. I. LÖBL & D. BURCKHARDT, 4 ex. MHNG, 1 ex. SMNS. – Sumatra, Prov. Aceh-Selatan, Babahrot, 100 m, 15.–22.VII.1983, leg. J. KLAPPERICH, 3 ex. HNHM. – Mentawei, Si Oban, IV.–VIII.1894, leg. E. MODIGLIANI, 4 ex. DEI. – Lombok, Sabito, 29.–30.IV.1986, leg. M. NISHIKAWA, 9 ex. CKMT, 2 ex. SMNS. – Sulawesi, 17 km E Pendolo, 800 m, 4.–9.VII.1999, leg. L. BOLM, 3 ex. SMNS. – Sulawesi, 15–25 km S Pendolo, Mayoa, 7.–10.IV.1999, leg. S. BEČVÁŘ & P. ZÁBRANSKÝ, 1 ex. CSBC. – Sulawesi, Poso, 5–10 km SW Tambarana, 1–400 m, 11.–16.IV.1999, leg. S. BEČVÁŘ & P. ZÁBRANSKÝ, 1 ex. CSBC. – Sulawesi, 20–35 km NW Palopo, 1000–1400 m, 4.–5.IV.1999, leg. S. BEČVÁŘ & P. ZÁBRANSKÝ, 1 ex. CSBC. – Malaysia, Cameron Highland, 24.III.1975, leg. Y. KIYOYAMA, 2 ex. CKAO. – W Malaysia, Perak, SE Taiping, Kg. Bukit Berapit, 18.–19.II.1998, leg. S. BEČVÁŘ, 2 ex. CSBC. – Malaysia, Johor, Endau-Rompin, Pulau Jasin, 50–400 m, 19.III.1998, leg. L. DEMBICKÝ & P. PACHOLÁTKO, 1 ex. CSBC. – Malaysia, Johor, Endau-Rompin, Selendang, 1.–4.III.1997, leg. I. JENIŠ, 1 ex. SMNS. – Malaysia, Selangor, 20 km N Kuala Lumpur, Hutan Kanching, 16.VIII.1993, leg. R. SCHUH, 1 ex. CSBC. – N Vietnam, 25 km W Thai-Nguyen, 2.XI.1976, leg. L. MEDVEDEV, 1 ex. HNHM.

Synonymy: In bigger males, both asymmetrical horns of the head are longer and have hairy tips, in smaller males the horns are shorter and only the longer (left) horn bears a brush of hairs at the tip – all other characters coincide, including the shape of the aedeagus. Thus, this difference is just a graduate difference connecting with the body size and not a specific difference as stated in the description of *P. latemarginatum* (GEBIEN 1927) when comparing with *P. sericeum*, *P. latemarginatum* being considered herein consequently as a junior synonym.

Remarks: Besides the length of and the setation on the male cephalic horns, the

colour pattern of pronotum and elytra varies from unicoloured dark brown to yellow brown with darker patches.

Distribution: Vietnam, W Malaysia, Sumatra (type locality of *P. latemarginatum*), Mentawei, Borneo (type locality of *P. sericeum*), Banguey, Simalur, Nias, Lombok, Sulawesi, Mindanao.

Platydema shiva Schawaller, 2003

Remarks: Described and figured by SCHAWALLER (2003).

Distribution: NE India (Meghalaya).

Platydema subfascium Walker, 1858

New material: China, Fujian, Kwangtsch, 9.X.1937, leg. J. KLAPPERICH, 6 ex. HNHM. – China, Canton, Pak-wan-san, 17.III.1912, leg. S. V. MELL, 2 ex. MNHUB. – Andaman Islands, Port Blair, 16.V.1982, leg. H. DETANI, 1 ex. CKAO. – Sri Lanka, Ratnapura Distr., Uda Walawe, 300 ft., 1.VIII.1973, leg. G. EKIS, 3 ex. HNHM. – Malaysia, Johor, 16 km NNW Mersing, 20.II.1994, leg. R. GRIMM & A. RACHINSKY, 9 ex. CRGT. – Malaysia, Pahang, 30 km S Pekan, 20.II.1994, leg. R. GRIMM & A. RACHINSKY, 9 ex. CRGT. – N Thailand, Chiang Mai, Vivaek, 13 km N Chiang Mai, 13.VI.1997, leg. C. W. & L. B. O'BRIAN, 7 ex. HNHM. – N Thailand, Chiang Mai, Doi Suthep, 1200–1300 m, 28.IV.2004, leg. W. SCHAWALLER, 2 ex. SMNS. – N Thailand, Nan, 500 m, 30.IV.–2.V.2004, leg. R. GRIMM, 1 ex. CRGT. – S Laos, Attapu Prov., Bolaven Plateau, 15 km SE Ban Houaykong, Lake Nong Lom, 800 m, 18.–30.IV.1999, leg. E. JENDEK & O. ŠAUŠA, 10 ex. CSBC. – N Vietnam, Cuc Phuong, 2.–11.V.1991, leg. J. STRNAD, 3 ex. NHMB. – Borneo, Sabah, Keningau, Kimanis Road, 28.IV.–2.V.1991, leg. T. HATAYAMA, 4 ex. CKMT. – N Sumatra, Langkat, 24.IX.1972, leg. D. ERBER, 9 ex. SMNS. – Sumatra, Aceh-Selatan, Pulau Kayu, 1.VII.1983, leg. J. KLAPPERICH, 6 ex. HNHM. – Sumatra, Aceh-Selatan, Babahrot, 100 m, 8.–13.VIII.1983, leg. J. KLAPPERICH, 40 ex. HNHM. – NE Sumatra, Tebing-tinggi, leg. SCHULTHEISS, 8 ex. DEI. – Sulawesi, 17 km E Pendolo, 800 m, 4.–9.VII.1999, leg. L. BOLM, 2 ex. SMNS. – S Sulawesi, Banting Murung, Ujung Pandang, 27.XII.1999, leg. K. ANDO, 5 ex. CKAO. – Lombok, Senaro, N slope of Rinjani, 2.–5.II.1994, leg. L. BOLM, 1 ex. SMNS. – N Halmahera, Kao, 21.III.1995, leg. W. LORENZ, 1 ♂ CRGT. – Maluku, Seram, 12 km SE Wahai, Solea, 16.–21.X.1998, leg. J. HORÁK, 1 ♀ CRGT. – Philippines, Palawan, Port Barton, 150 m, 14.–18.XII.1990, leg. L. BOLM, 15 ex. NHMB, 2 ex. SMNS. – Philippines, Bohol, Jao Isl., 6.III.1991, leg. W. SCHAWALLER, 5 ex. SMNS. – Philippines, Luzon, Imugan, 25.V.1916, leg. S. BÖTTCHER, 13 ex. MNHUB. – Philippines, Luzon, La Trinidad, 15.V.1914, leg. S. BÖTTCHER, 1 ex. MNHUB, 1 ex. SMNS. – Philippines, Mindanao, Surigao, 30.X.1915, leg. S. BÖTTCHER, 2 ex. MNHUB. – Taiwan, Kaohsiung County, Shanping Forest Recreation Area, near Liukuei, 19.–21.XI.2002, leg. L. RONKAY & O. MERKL, 2 ex. HNHM. – Taiwan, Hoozan, IX.1910, leg. H. SAUTER, 7 ex. DEI.

Remarks: Described and figured by SCHAWALLER (2003). In material from a few localities (Laos, Philippines: Bohol and Palawan) I found among males with the "usual" asymmetrical head armature (right horn long with setation, left horn short without setation), also a few males with two long symmetrical horns, both with setation at the tip. In material from other Philippine localities (Luzon), all males have this symmetrical armature. All other characters, in particular aedeagus und dorsal colour pattern) coincide. At present, I consider these differences as infraspecific variations.

Distribution: Widespread in SE Asia, Japan, Taiwan, Philippines.

Platydema sulcipenne Gebien, 1925

Remarks: According to the original description, this species shares with *Platydema subfascium* the structure of the armed male head, and the dorsal colour pattern

is said to be somewhat similar. The structure of the elytral intervals is given as main "difference": slightly convex in *P. subfascium*, distinctly convex in *P. sulcipenne*.

Distribution: Saleyer Island (S of Sulawesi).

Platydema sumatranum Gebien, 1925 (Figs. 45, 181–183)

Studied type-material: Sumatra, Liangagas, leg. H. Dohrn, 1 ♀ paratype NHMB-F (labelled as cotype).

New material: Borneo, Sabah, Tibow, 45 km NE Sapulut, 600–900 m, 7.–15.IV.2000, leg. L. Bolm, 11 ex. NHMB, 3 ex. SMNS. – Borneo, Sabah, road Ranau–Kota Kinabalu E Mt. Kinabalu, 1150 m, 24.V.1987, leg. D. Burckhardt & I. Löbl, 1 ex. MHNG. – S Sulawesi, Ujung Pandang, 4.I.2000, leg. K. Ando, 1 ♀ CKAO.

Remarks: The dorsal colour pattern and other external characters of the series from Borneo coincide with the available female paratype from Sumatra, thus I consider conspecifity although the aedeagi could not be compared. The female from Sulawesi agrees in the dorsal colour pattern.

Distribution: Sumatra (type locality), Borneo, Sulawesi.

Platydema suturatum Gebien, 1927 (Figs. 28, 184–186)

Studied type-material: Sumatra, Fort de Kock, leg. E. Jacobson, holotype (sex not examined) NHMB-F (labelled as type), 2 paratypes HNHM (labelled as cotypes), 1 paratype DEI (labelled as cotype).

New material: Borneo, Sabah, Crocker Range, E slope of Gunung Emas, 700 m, 1.–5.IV.2000, leg. L. Bolm, 3 ex. NHMB, 1 ex. SMNS.

Distribution: Sumatra (type locality), Borneo.

Platydema tricuspis Motschulsky, 1873 (Figs. 7, 187–189)

New material: Malaysia, Pahang, Pulau Tioman, Kampung Juara, 14.III.1995, leg. O. Merkl, 1 ex. HNHM. – Malaysia, Pahang, Tioman Island, Kampung Paya, 17.VII.1993, leg. R. Schuh, 2 ex. CRSW. – W Malaysia, Johor, Mt. Ledang (Mt. Ophir), 28.II.1998, leg. S. Bečvář, 8 ex. CSBC, 2 ex. SMNS. – Malaysia, Chendenriang, 8.VIII.1973, leg. G. Minet, 3 ex. NHMB. – Malaysia, Penang, 15.–16.VII.1984, leg. H. Konishi, 3 ex. CKAO. – Malaysia, Kuala Kurai, 29.IV.–1.V.1975, leg. Y. Kiyoyama, 2 ex. CKAO. – Thailand, Chiang Mai, NE Mae Taeng, Pong Deud Hot Springs, 30.IV.2003, leg. R. Grimm, 2 ex. CRGT. – Thailand, Chumphon Prov., Pha To, 1.–11.V.1998, leg. P. Průdek & R. Šigut, 7 ex. CSBC. – Burma, Bhamò, VI.1886, leg. L. Fea, 1 ex. DEI. – Laos, Bolikhamsai Prov., 8 km NE Ban Nape, 600 m, 1.–18.V.2001, leg. V. Kubáň, 1 ex. NHMB. – S India, Kerala, Alleppey, 8.–9.X.1991, leg. R. Schuh, 1 ♀ CSBC. – Borneo, Sabah, Kampung Takala, Kinabatangan River, 5.VI.1998, leg. J. Kodada & F. Čiampor, 10 ex. SMNS. – Borneo, Sabah, Keningau, Bandukan, 28.IV.1995, leg. C. Adrian, 1 ex. CKAO. – Borneo, Sabah, Keningau, Kimanis Road, 1.–2.V.1991, leg. T. Hatayama, 1 ex. CKMT. – N Sumatra, Dolok Merangir, 120 m, 20.IX.1972, leg. D. Erber, 2 ex. SMNS. – Sumatra, Prov. Aceh-Selatan, Babahrot, 100 m, 8.–13.VIII.1983, leg. J. Klapperich, 16 ex. HNHM, 2 ex. SMNS. – Mentawei, Si Oban, IV.–VIII.1894, leg. E. Modigliani, 3 ex. DEI. – Nias, eastern coast, Lawalo, 26.IX.1979, leg. D. Erber, 3 ex. SMNS. – Sulawesi, Lake Poso, Pendolo, Boe, 21.VIII.1990, leg. A. Riedel, 1 ex. SMNS. – Sulawesi, W Lake Poso, Taipa, 10.–11.IV.1999, leg. S. Bečvář & P. Zábranský, 3 ex. CSBC. – Sulawesi, 15–25 km S Pendolo, Mayoa, 7.–10.IV.1999, leg. S. Bečvář & P. Zábranský, 1 ex. CSBC, 1 ex. SMNS. – E Sumba, 20 km S Waingapu, Wairinding, 300 m, 30.I.–2.II.2001, leg. Votruba, 1 ex. CSBC. – Lombok, Sabito, 29.–30.IV.1986, leg. M. Nishikawa, 10 ex. CKMT. – Philippines, SW Panay, 8 km E Bontol, 200 m, 10.–11.XII.1990, leg. L. Bolm, 1 ex. SMNS. – Philippines, Sibuyan, Romblon, IX.1983, 1 ex. CKAO.

Remarks: See remarks under *Platydema fumosum*.

Distribution: Widespread in SE Asia, Philippines, New Guinea, Australia.

Platydema unicornis Gebien, 1927 (Figs. 14, 193–195)

Studied type-material: Sumatra, Fort de Kock, leg. C. JACOBSON, ♂ holotype NHMB-F (labelled as type).

New material: W Malaysia, Tapah, 2.IX.1973 and 8.VIII.1974, leg. G. MINET, 3 ex. NHMB, 1 ex. SMNS. – W Malaysia, Lenggong, 13.III.1974, leg. Y. KIYOYAMA, 1 ♀ CKAO. – S Thailand, Yala Distr., Betong, Gunung Cang Dun, 25.III.–22.IV.1993, leg. J. HORÁK, 1 ♀ CSBC.

Distribution: W Malaysia, Thailand, Sumatra (type locality).

Platydema velutinum Walker, 1858 (Figs. 5, 196–198)

New material: N Sri Lanka, Nedunleni, 6.II.1970, leg. R. MUSSARD, C. BESUCHET & I. LÖBL, 3 ex. MHNG. – Sri Lanka, Negombo, 1899, leg. W. HORN, 7 ex. DEI, 1 ex. SMNS. – Sri Lanka, Puttalam, 1899, leg. W. HORN, 2 ex. DEI. – Sri Lanka, Nalanda, 1899, leg. W. HORN, 6 ex. DEI.

Remarks: See remarks under *Platydema fumosum*.

Distribution: Sri Lanka.

Platydema vishnu Schawaller, 2003

Remarks: Described and figured by SCHAWALLER (2003).

Distribution: NE India (Meghalaya).

Platydema waterhousei Gebien, 1925 (Figs. 17, 190–192)

Platydema plagiatum Waterhouse, 1894 (homonym of *P. plagiatum* Motschulsky, 1873).

New material: W Malaysia, Lenggong, 13.III.1974, leg. Y. KIYOYAMA, 3 ex. CKAO. – W Malaysia, Sungai Dua Gemas, 19.IV.1975, leg. Y. KIYOYAMA, 1 ex. CKAO. – W Malaysia, Kedah, Gunung Jerai, 100–500 m, 8.VIII.1993, leg. R. SCHUH, 2 ex. CRSW. – W Thailand, Klong Lan NP, 50 km SW Kamphaeng Phet, 2.–5.VII.1997, leg. J. REJSEK, 1 ex. SMNS. – NW Thailand, Mae Hong Son, Ban Huai Po, 1600–2000 m, 8.–18.V.1992, leg. J. HORÁK, 1 ex. CSBC. – NW Thailand, road 30 km NE Mae Hong Song, 500 m, 21.–23.IV.2004, leg. W. SCHAWALLER, 1 ex. SMNS. – S Vietnam, My Tho, 1.XII.1988, leg. S. BEČVÁŘ, 6 ex. CSBC. – Borneo, Sabah, Crocker Range, Gunung Alab, 1700 m, 23.–29.V.1998, leg. J. KODADA & F. ČIAMPOR, 1 ex. SMNS. – Borneo, Sabah, Kampung Takala, Kinabatangan River, 5.VI.1998, leg. J. KODADA & F. ČIAMPOR, 3 ex. SMNS. – Borneo, Sabah, Keningau, 10.–20.X.1988, leg. M. ITOH, 1 ex. CKAO. – Borneo, Sabah, Tibow 45 km NE Sapulut, 600–900 m, 7.–15.IV.2000, leg. L. BOLM, 9 ex. NHMB, 1 ex. CSBC. – Borneo, Sabah, Poring Hot Springs, 485–600 m, 8.–9.V.1987, leg. D. BURCKHARDT & I. LÖBL, 9 ex. MHNG. – Borneo, Sabah, Bunsit, 29.VII.1985, leg. M. NISHIKAWA, 27 ex. CKMT. – Borneo, Sarawak, Sebadai Park, 9 km SW Kapit, 50 m, 20.V.1994, leg. I. LÖBL & D. BURCKHARDT, 23 ex. MHNG. – Sumatra, Gunung Talamau, 17 km E Simpangempat, 750 m, 21.–25.V.2001, leg. L. BOLM, 3 ex. NHMB. – S Sumatra, Lampung Prov., Bukit Barisan Selatan NP, 5 km SW Liwa, 600 m, 7.–17.II.2000, leg. J. BEZDĚK, 15 ex. SMNS. – Mentawei, Si Oban, IV.–VIII.1894, leg. E. MODIGLIANI, 3 ex. DEI. – Central Sulawesi, 17 km E Pendolo, 800 m, 4.–9.VII.1999, leg. L. BOLM, 19 ex. SMNS, 2 ex. CKAO. – Central Sulawesi, 20–35 km NW Palopo, 1000–1400 m, 4.–5.IV.1999, leg. S. BEČVÁŘ & P. ZÁBRANSKÝ, 3 ex. CSBC. – W Bali, S Gilimanuk, 8 km E Cekik, 13.–16.XII.2000, leg. R. GERSTMEIER, 1 ex. CRGT. – Lombok, Sabito, 29.–30.IV.1986, leg. M. NISHIKAWA, 90 ex. CKMT. – Philippines, Luzon, Ifugao Prov., Mt. Polis, 1900 m, 4.–5.VI.1977, leg. M. SATO, 14 ex. CKAO. – Philippines, Palawan, Port Barton, 150 m, 14.–18.XII.1990, leg. L. BOLM, 13 ex. NHMB.

Remarks: GEBIEN's "plesiotype" of *P. waterhousei* n. nom. has been studied (Banguey, NHMB-F; sex not examined).

Distribution: Widespread in SE Asia, Philippines.

4 Descriptions of new species of *Platydema* Laporte & Brullé, 1831

Platydema andoi **n. sp.** (Figs. 20, 55–57)

Holotype (♂): Borneo, Sabah, Kinabalu [erroneously labelled Kinabaru], 15.IV.1982, leg. M. Yamamoto, CKAO.

Paratypes: Same data as holotype, 4 ex. CKAO, 2 ex. SMNS. – Borneo, Sabah, Kinabalu NP, Headquarter, 23.V.1981, leg. M. Yamamoto, 1 ♂ CKAO. – Borneo, Sabah, Crocker Range NP, Gunung Emas, 1600 m, 6.–18.VI.1996, leg. J. Kodada & F. Čiampor, 1 ♀ SMNS. – Borneo, Sabah, Crocker Range NP, Gunung Emas, 1500–1700 m, 6.–18.VI.1996, leg. J. Kodada & F. Čiampor, 1 ♀ HNHM. – Borneo, Sabah, Mt. Kinabalu, 1750 m, 21.IV.1987, leg. D. Burckhardt & I. Löbl, 1 ♂ MHNG. – Borneo, Sabah, Kinabalu NP, Headquarter at Liwagu River, 1500 m, 18.V.1987, leg. A. Smetana, 1 ♀ MHNG. – Borneo, Sabah, Gunung Emas, 21.III.–20.IV.1996, leg. Linda, 1 ex. CSBC.

Etymology: Named after Dr. Kiyoshi Ando (Osaka) for long-term cooperation in tenebrionid systematics.

Description: Body length 4.0–4.5 mm. Dorsal side glabrous and unicoloured dark brown with distinct metallic shine, surface shining; tibiae and tarsi light brown (Fig. 20). Head with rough, but not confluent punctation. Head in males (Fig. 55): frons with two asymmetrical horns, right horn longer and pointing more upwards, left horn shorter and pointing forewards, horns without setation; clypeus medially with a distinct tooth. Proportions of the antennal segments as in Fig. 56, antennomere 3 short. Pronotum slightly convex, with finer and sparser punctation than on head, basally on each side with a feeble impression; basal margin completely and distal margin medially unbordered, lateral margins finely and completely bordered; anterior margin only slightly excavated and anterior corners not protruding. Propleura with similar punctation as on pronotum, without longitudinal wrinkles. Elytra convex and oval, 1.2 times longer than wide, besides scutellar row and lateral margin with 8 rows of punctures without striae (third row with about 45 punctures); intervals flat and with somewhat finer and sparser punctation than on pronotum, without setation. Abdominal sternites with short setation, lateral punctures sometimes confluent. Legs without peculiarities, male tarsi not dilatated, tibiae externally with crenulated indistinct keels. Aedeagus as in Fig. 57.

Diagnosis: *Platydema andoi* n. sp. belongs to the group of small species with unicoloured metallic dorsal side and is quite similar in general shape and dorsal punctation to *Platydema javanicum*, but this species has an unarmed male head and a different aedeagus. *Platydema marseuli* belongs to the same group of small metallic species and has an armed male head, but both horns are of the same length, the elytral rows of punctures are in distinct striae, and the aedeagus is also different.

Platydema becvari **n. sp.** (Figs. 38, 52–54)

Holotype (♂): W Malaysia, Perak, Taiping, Bukit Larut (Maxwell Hill), 14.IV.1996, leg. S. Bečvář, CSBC.

Paratypes: Same data as holotype, 17 ex. CSBC, 5 ex. SMNS.

Etymology: Named after Standa Bečvář (České Budějovice), collector of the type series, and partner of long-term cooperation.

Description: Body length 2.5–3.2 mm. Dorsal side glabrous and unicoloured brown without any metallic shine, pronotum feebly darker, surface shining; tibiae, tarsi and antenna somewhat lighter (Fig. 38). Head with fine and sparse punctation. Head in males (Fig. 52): frons with two short and symmetrical horns pointing forewards, horns without setation; clypeus medially without any armature. Proportions

of the antennal segments as in Fig. 53, antennomere 3 short. Pronotum slightly convex, with fine punctation as on head, basally on each side with a distinct impression; basal margin and distal margin medially unbordered, lateral margins finely and completely bordered; anterior margin only slightly excavated and anterior corners not protruding. Propleura with similar punctation as on pronotum, without longitudinal wrinkles. Elytra convex and round, 1.3 times longer than wide, besides scutellar row and lateral margin with 8 rows of punctures without striae (third row with about 40 punctures); intervals flat and without distinct punctation. Abdominal sternites with short setation, laterally with confluent punctures forming longitudinal wrinkles. Legs without peculiarities, male tarsi not dilatated, tibiae externally with crenulated indistinct keels. Aedeagus as in Fig. 54.

Diagnosis: *Platydema becvari* n. sp. can be recognized by the round body shape, the unicoloured brown body, the male head with a pair of symmetrical short horns without setation, an unarmed clypeus, fine elytral rows without striae and by the shape of the aedeagus. Only *Platydema kovaci* n. sp. is similar, also in the shape of the aedeagus, but this species is bigger, the pronotum is distinctly darker than the elytra, the male head bears only one single (right) horn, and the punctures of the elytral rows are somewhat smaller.

Platydema bocaki **n. sp.** (Figs. 2, 58–60)

Holotype (♂): Thailand, Mae Sae, 750 m, 15.V.1993, leg. L. Bocák, SMNS.
Paratypes: Same data as holotype, 5 ex. SMNS.

Etymology: Named after Dr. Ladislav Bocák (Olomouc), collector of the type series, and partner of long-term cooperation.

Description: Body length 6.0–7.5 mm. Dorsal side glabrous and unicoloured brown without any metallic shine, surface dull; tibiae, tarsi and antenna somewhat lighter (Fig. 2). Head with irregular and dense but not confluent punctation. Head in males (Fig. 58) without any sexual characters. Proportions of the antennal segments as in Fig. 59, antennomere 3 short. Pronotum slightly convex, with sparser punctation than on head, basally on each side with a distinct impression; basal margin and distal margin medially unbordered, lateral margins finely and completely bordered; anterior margin only slightly excavated and anterior corners not protruding. Propleura with finer and sparser punctation than on pronotum, without longitudinal wrinkles. Elytra flat and longitudinal, 1.4 times longer than wide, besides scutellar row and lateral margin with 8 rows of punctures without striae (third row with about 55 punctures); intervals flat and with fine punctation. Abdominal sternites with very short setation, laterally with feeble impressions and confluent punctures but not forming longitudinal wrinkles. Mesotibia of males feebly curved; metatibia of males distinctly curved with a narrow basal part and with an abruptly wider distal part, internal side of male metatibia with distinct granules; male tarsi not dilatated, tibiae externally with crenulated indistinct keels. Aedeagus as in Fig. 60.

Diagnosis: *Platydema bocaki* n. sp. belongs to the small group of Oriental species with a dull surface around *Platydema detersum* without sexual dimorphism of the male head and with particular sexual characters on the male legs. It can be recognized by the longitudinal body shape with long and parallel elytra (rounder in *P. detersum* or *P. maculicolle*), by a brown surface (blackish in *P. detersum* and *P. maculicolle*), by the strongly curved male metatibiae (mesotibia curved in *P. detersum* and *P. maculicolle*) and by the shape of the aedeagus.

Remarks: CHEVROLAT (1878) described *Platydema fuscicorne* from Malacca (listed herein under the doubtful taxa) with a dull surface ("tomentosum"), but this taxon seems not to be identical with *Platydema bocaki* n. sp. In the description the body shape is "ovale, convexum" and in the diagnosis the body shape is "étroite et allongée" (as in *P. bocaki* n. sp.). The elytral intervals are said to be convex, in *P. bocaki* n. sp. the intervals are absolutely flat. The head is said to have three longitudinal lines, a character which I have never seen in any species of *Platydema*.

Platydema cardamonicum **n. sp.** (Figs. 41, 61–63)

Holotype (♂): S India, Kerala, 15 km SW Munnar, Kallar Valley, 1250 m, 1.–9.V.1997, leg. L. DEMBICKÝ & P. PACHOLÁTKO, NHMB.

Paratype: S India, Kerala, Cardamon Hills, 10 km SW Munnar, Vattiar, 1000 m, 5.–17.XII.1993, leg. D. BOUKAL & Z. KEJVAL, 1 ♂ CSBC.

Etymology: Named after the Cardamon Hills in southern India, where the type series was collected.

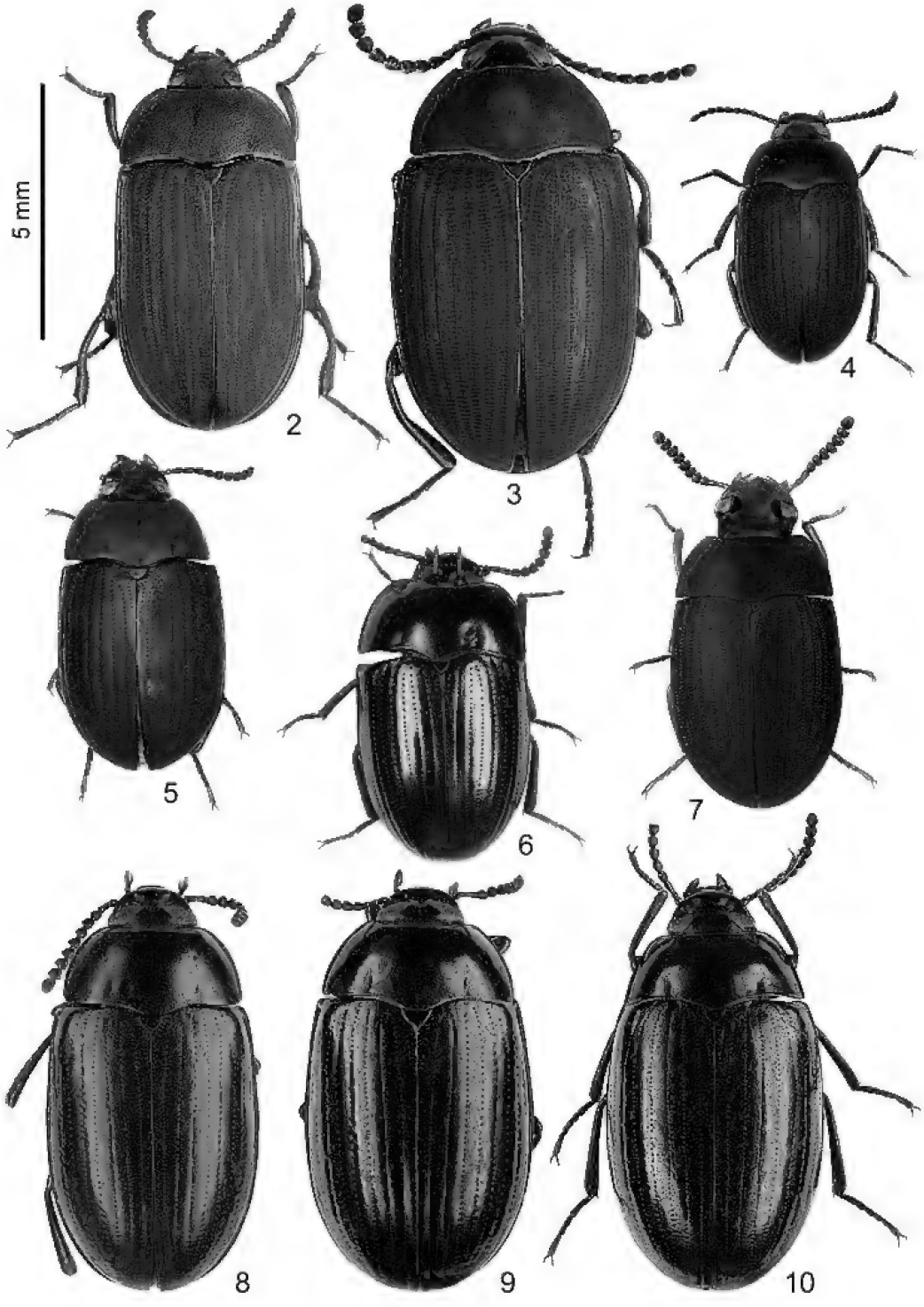
Description: Body length 6.0–6.2 mm. Dorsal side glabrous and unicoloured brown without any metallic shine, surface shagreened; tibiae, tarsi and antenna somewhat lighter (Fig. 41). Head with irregular and dense, sometimes confluent punctation. Head in males (Fig. 61): frons with two asymmetrical horns pointing upwards, left horn long and tip with a small brush of hairs, right horn short and broad and without setation; head distinctly prolonged forwards, clypeus bent upwards and medially with a distinct tooth. Proportions of the antennal segments as in Fig. 62, antennomere 3 long. Pronotum flat, with finer punctation than on head, basally on each side with a distinct impression; basal margin and distal margin medially unbordered, lateral margins finely and completely bordered; anterior margin excavated and anterior corners protruding. Propleura with similar punctation as on pronotum, without longitudinal wrinkles. Elytra flat and oval, 1.3 times longer than wide, besides scutellar row and lateral margin with 8 rows of punctures in distinct striae (third row with about 45 punctures); intervals distinctly convex and with finer but denser punctation than on pronotum. Abdominal sternites with short setation, laterally with some confluent punctures forming longitudinal wrinkles. Legs without peculiarities, male tarsi not dilatated, tibiae externally with crenulated indistinct keels. Aedeagus as in Fig. 63.

Diagnosis: *Platydema cardamonicum* n. sp. is quite similar to *Platydema alticornis* Gravely, 1915 and is probably its sister-species; both share the distinctly prolonged head with an upbent clypeus, which does not occur on other *Platydema* species and which was an argument for GEBIEN (1925c) to establish the genus *Anisocara* n. syn. *Platydema cardamonicum* n. sp. can be separated by a more convex body, by a different shape of the pronotum (shorter and broader in *P. alticornis*), by a different head armature in males (asymmetrical horns broad and pointing upwards in *P. cardamonicum* n. sp., horns long and pointing backwards in *P. alticornis*), and by a different shape of the aedeagus (parameres laterally sinuated and with acute tip in *P. cardamonicum* n. sp., parameres straight and with rounded tip in *P. alticornis*).

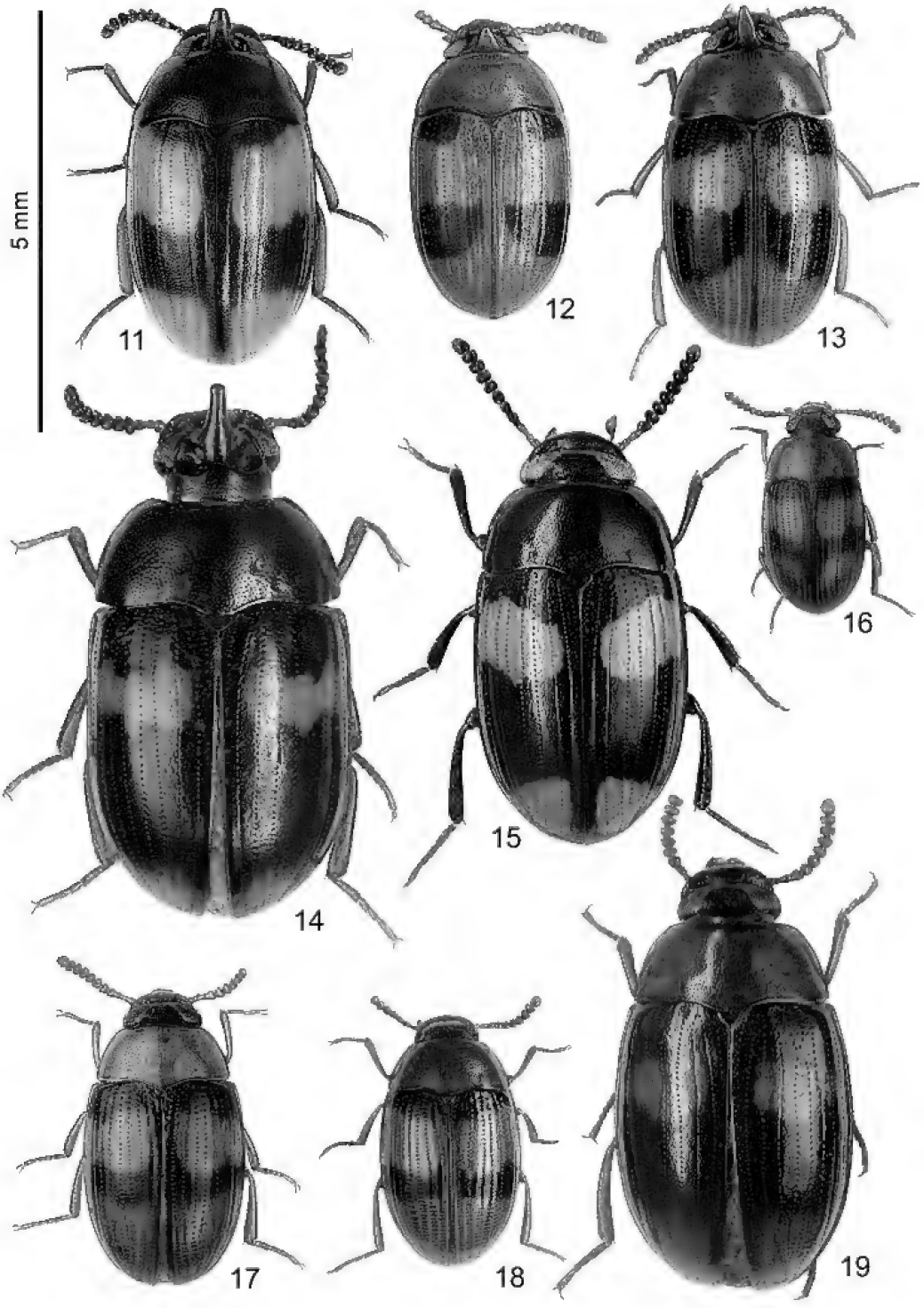
Platydema guangxicum **n. sp.** (Figs. 6, 82–84)

Holotype (♂): China, N Guangxi, S Miaoershan, 1300–2000 m, 25.–26.VI.1997, leg. L. BOLM, SMNS.

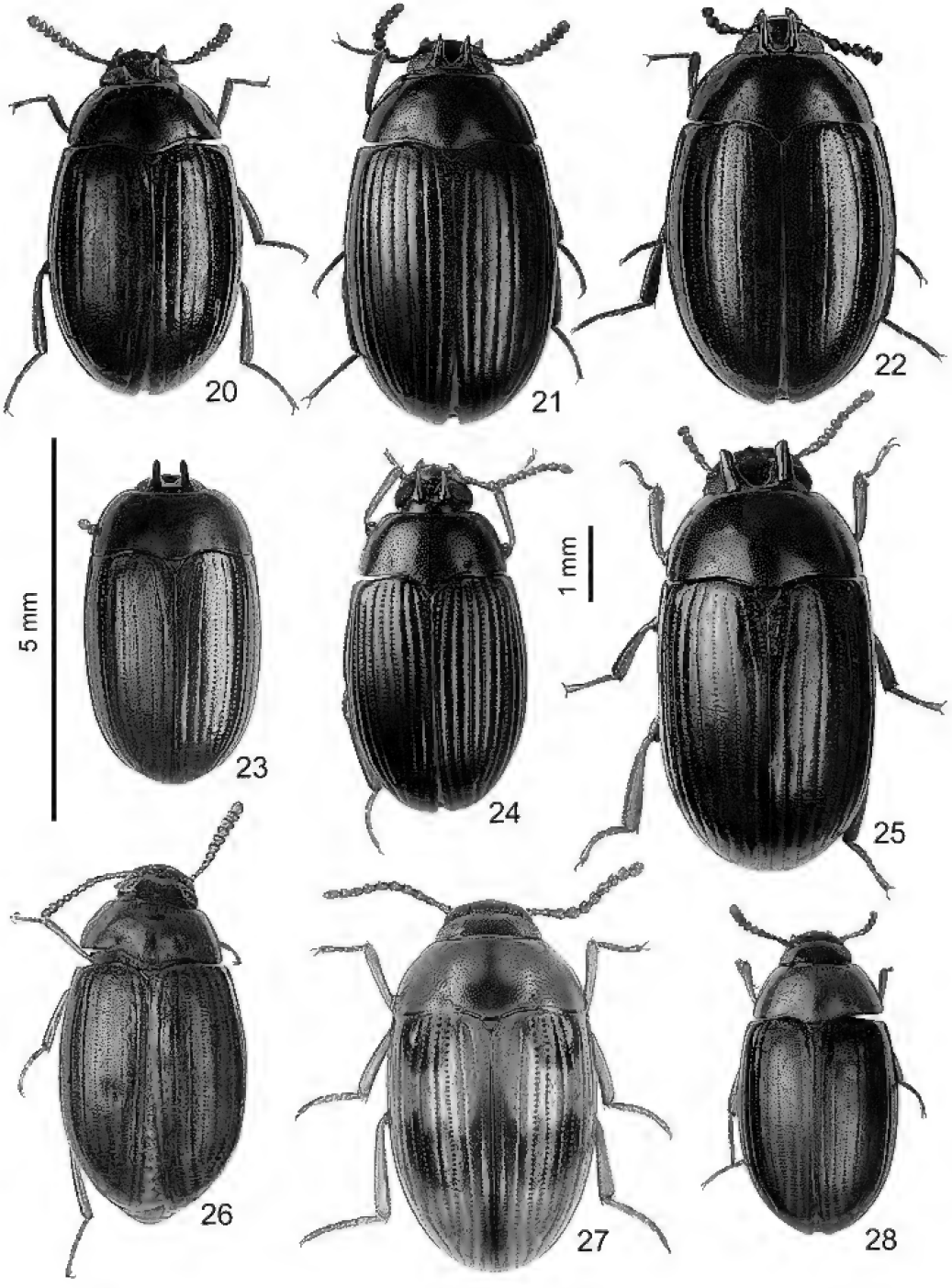
Paratype: Same data as holotype, 1 ♀ SMNS.



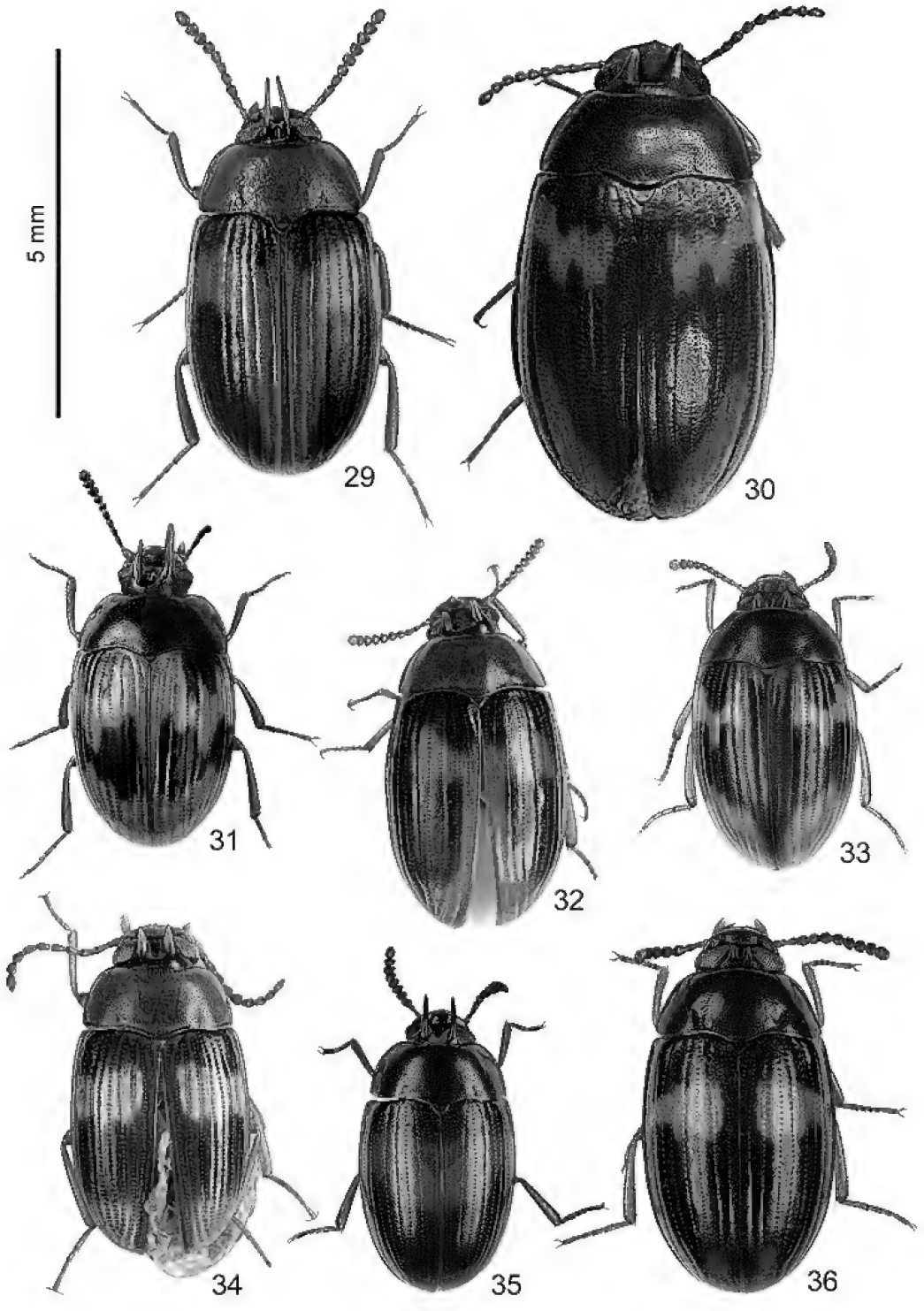
Figs. 2–10. Dorsal view of *Platydema* male species. – **2**. *P. bocaki* n. sp., holotype. **3**. *P. maculicolle*, Java. **4**. *P. fumosum*, China. **5**. *P. velutinum*, Sri Lanka. **6**. *P. guangxicum* n. sp., holotype. **7**. *P. tricuspis*, Borneo. **8**. *P. coeruleum*, lectotype. **9**. *P. sauteri*, lectotype. **10**. *P. yunnanicum* n. sp., holotype.



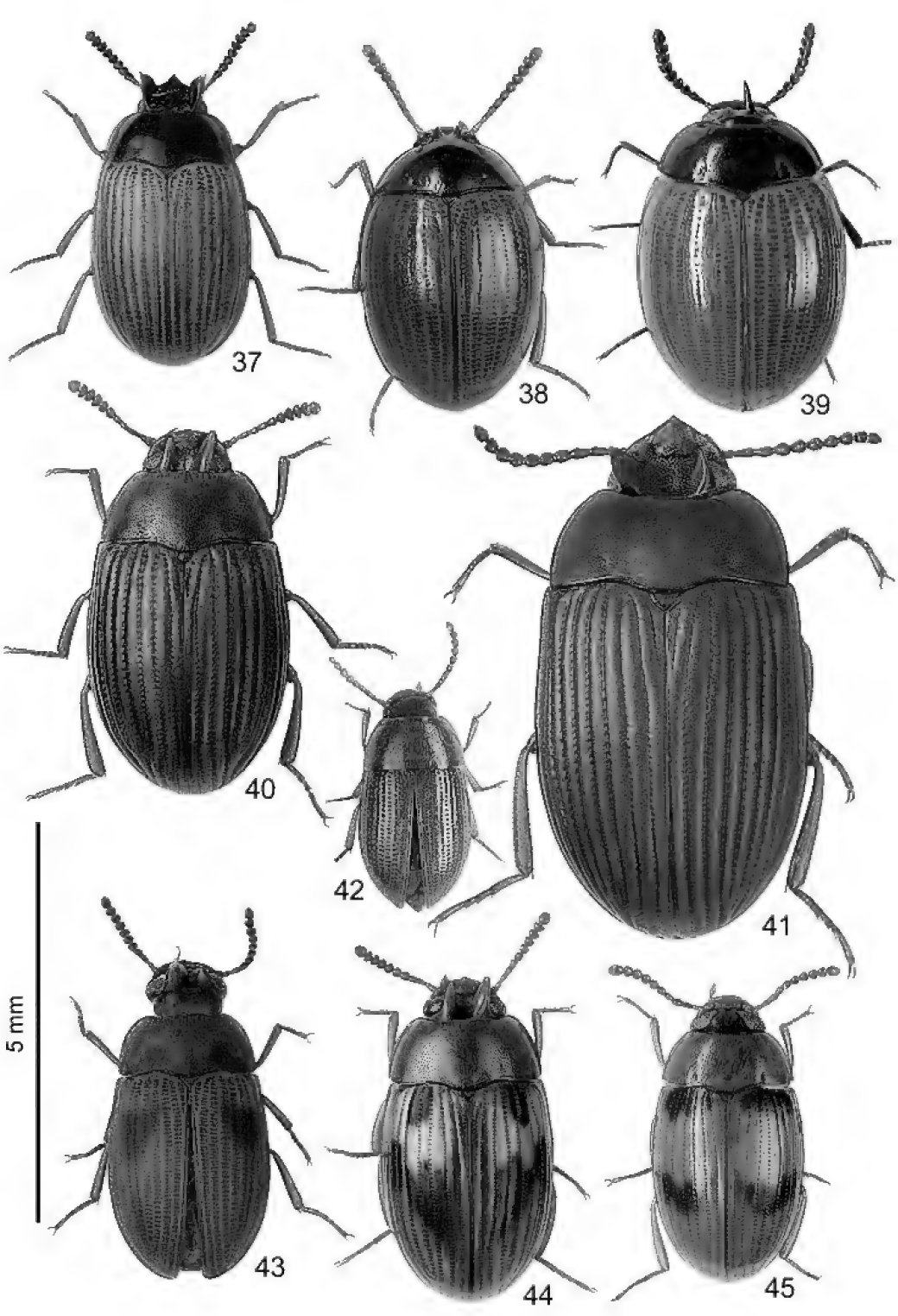
Figs. 11–19. Dorsal view of *Platydema* male species. – **11**. *P. monoceros*, "plesiotype", Mentawei. **12**. *P. rectum*, paratype. **13**. *P. ribbei*, Sulawesi. **14**. *P. unicornis*, W Malaysia. **15**. *P. planum*, holotype. **16**. *P. pallidicolle*, Borneo. **17**. *P. waterhousei*, Borneo. **18**. *P. javanum*, Sumatra. **19**. *P. perpolitum*, Sumatra.



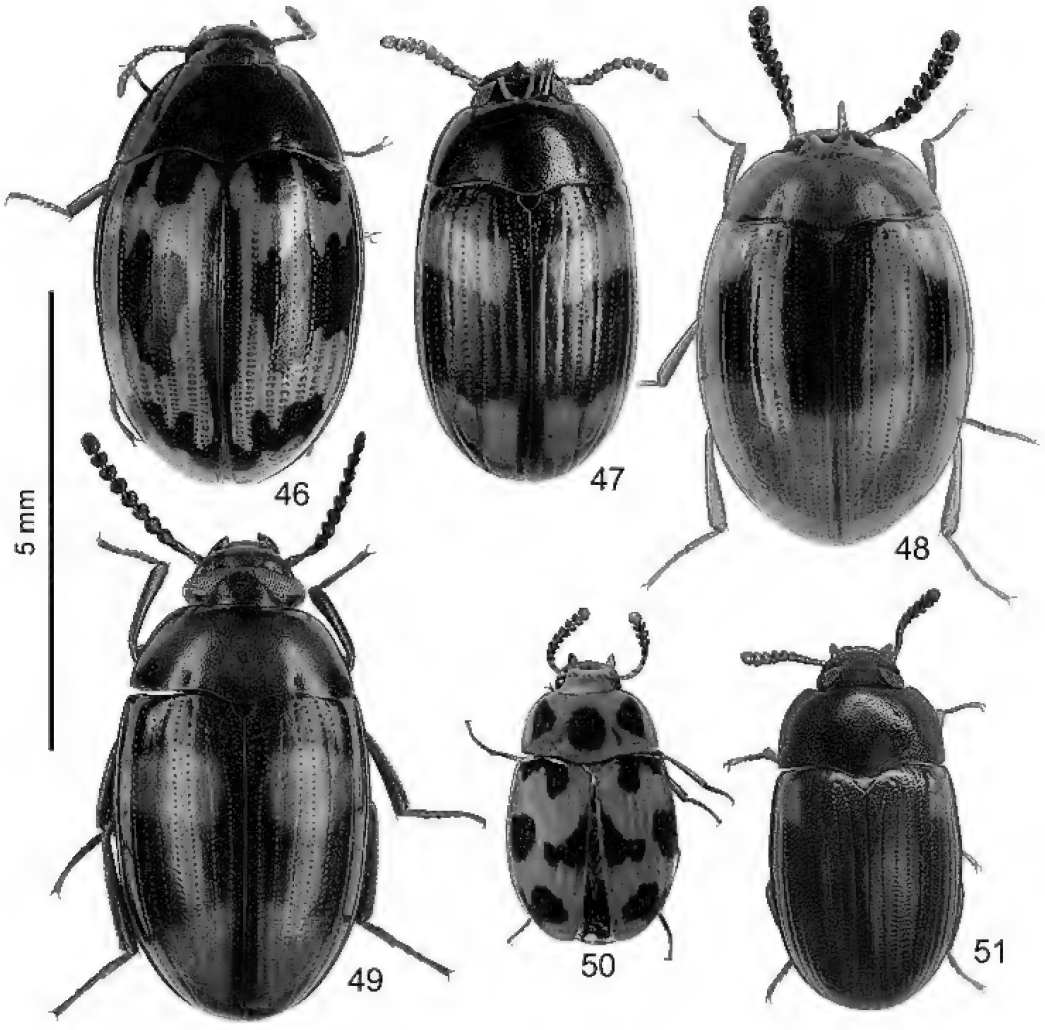
Figs. 20–28. Dorsal view of *Platydema* male species. – **20**. *P. andoi* n. sp., holotype. **21**. *P. marseuli*, Japan. **22**. *P. mindanaoicum* n. sp., holotype. **23**. *P. lewisi*, paratype. **24**. *P. recticorne*, Japan. **25**. *P. orientalis*, Thailand. **26**. *P. javanicum*, holotype. **27**. *P. reibnitzi* n. sp., holotype. **28**. *P. suturatum*, Borneo.



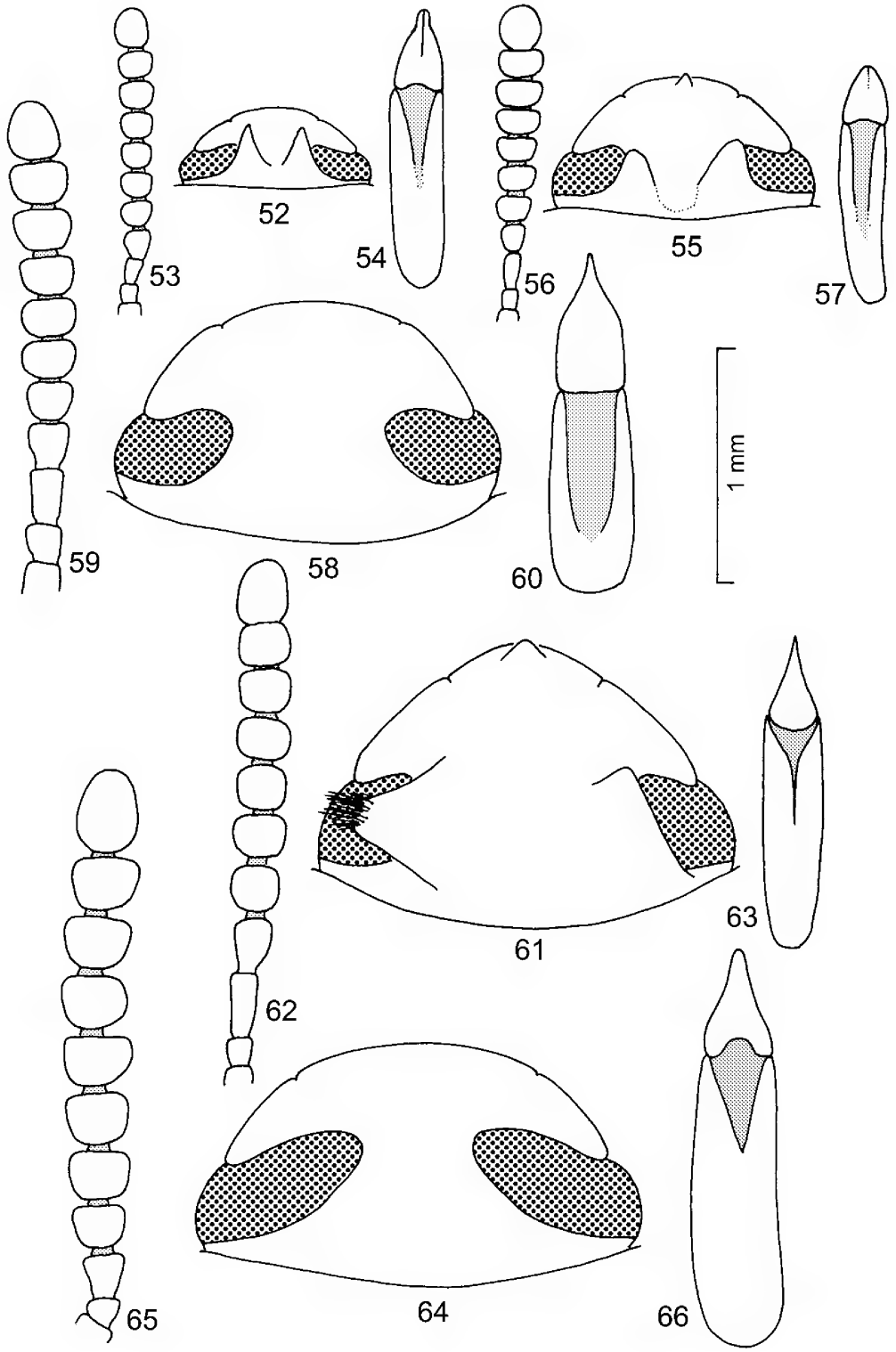
Figs. 29–36. Dorsal view of *Platydema* male species. – **29**. *P. indicum*, Thailand. **30**. *P. longivittis*, paratype. **31**. *P. loebli* n. sp., holotype. **32**. *P. masumotoi* n. sp., holotype. **33**. *P. poringicum* n. sp., holotype. **34**. *P. schultheissi*, holotype. **35**. *P. merkli* n. sp., holotype. **36**. *P. sulawesicum* n. sp., holotype.



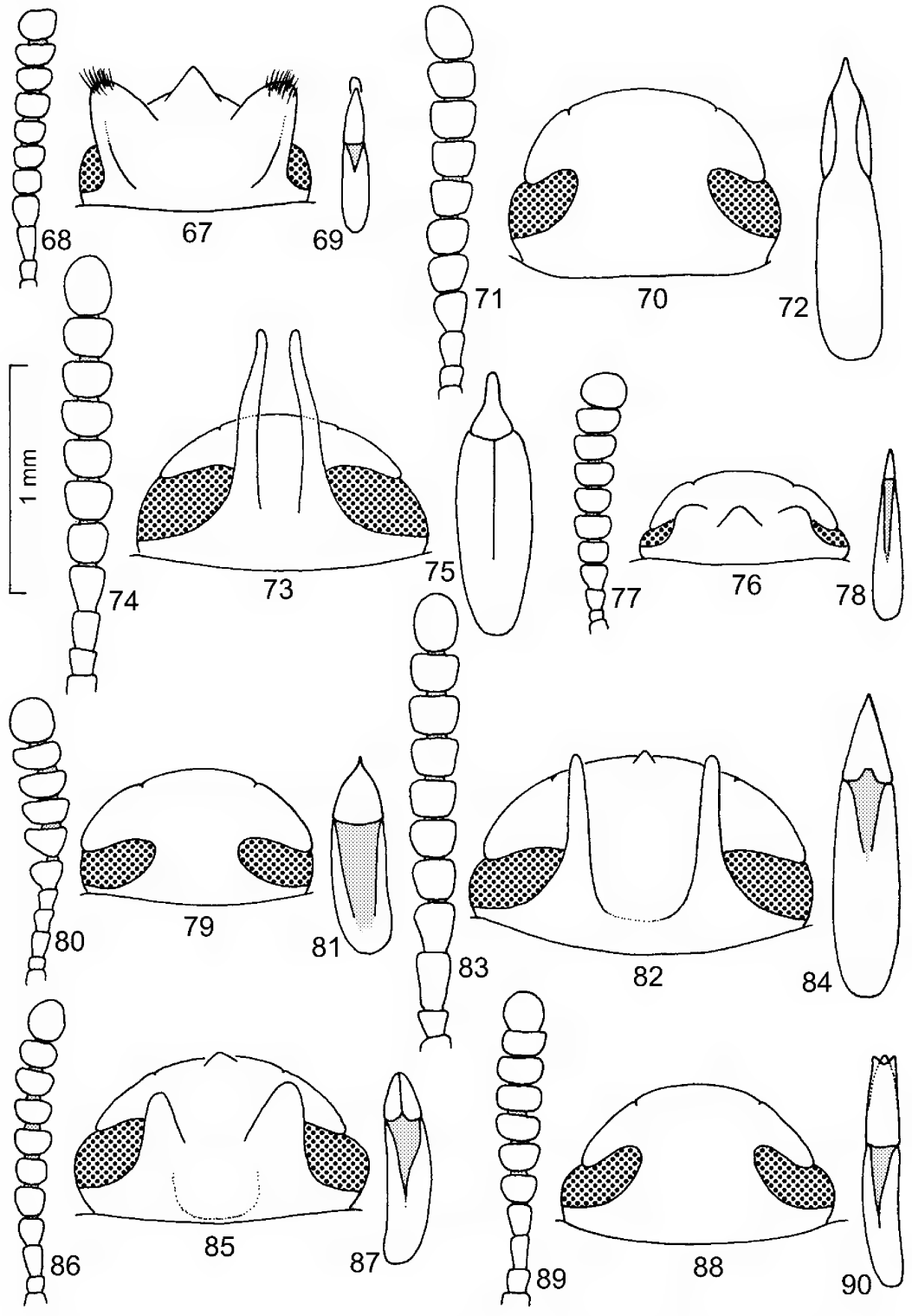
Figs. 37–45. Dorsal view of *Platydema* male species. – **37**. *P. flavosericeum*, Sri Lanka. **38**. *P. becvari* n. sp., holotype. **39**. *P. kovaci* n. sp., holotype. **40**. *P. sericeoideum*, Sri Lanka. **41**. *P. cardamonicum* n. sp., holotype. **42**. *P. pentaphylloides*, Malaysia. **43**. *P. sericeum*, holotype of *P. latemarginatum* n. syn. **44**. *P. jacobsoni*, Borneo. **45**. *P. sumatranum*, Borneo.



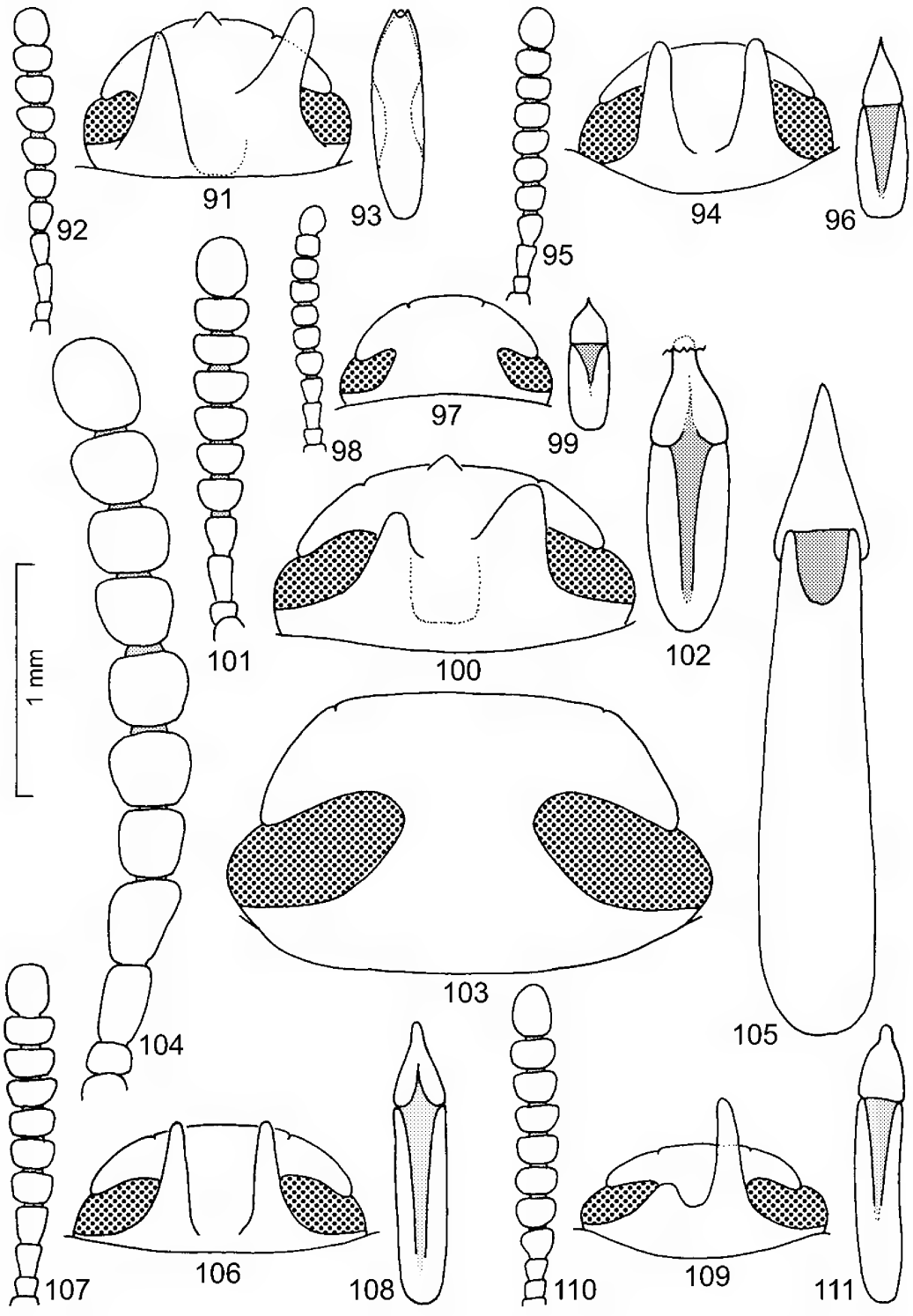
Figs. 46–51. Dorsal view of *Platydema* male species. – **46**. *P. flavopictum*, Taiwan. **47**. *P. seminitens*, Brunei. **48**. *P. riedeli* n. sp., holotype. **49**. *P. palungicum* n. sp., holotype. **50**. *P. cechenosternoides*, Thailand. **51**. *P. nuciferae*, Solomon Islands.



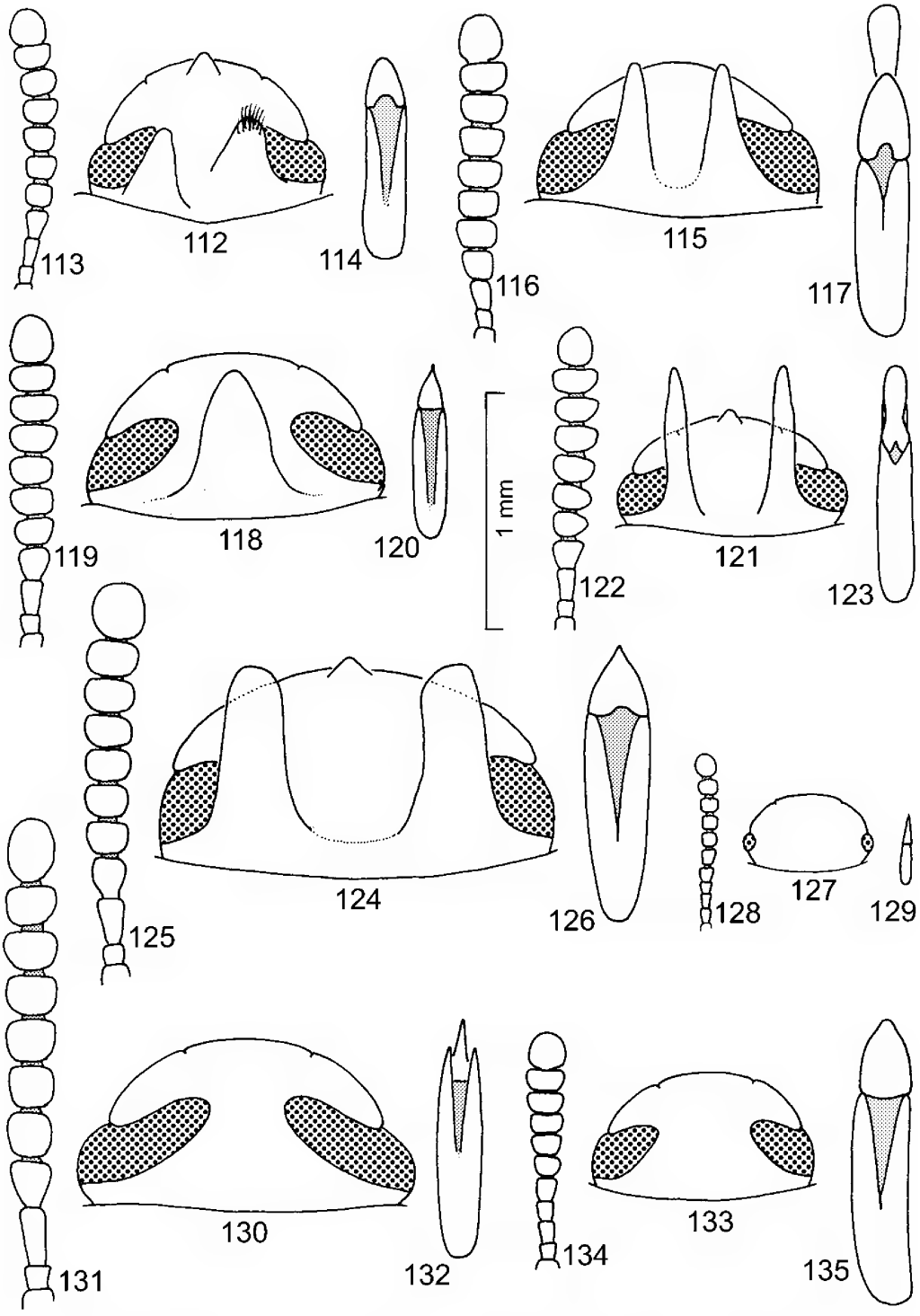
Figs. 52–66. Male head, antenna and aedeagus of *Platydema* species. – **52–54**. *P. becvari* n. sp., holotype. **55–57**. *P. andoi* n. sp., holotype. **58–60**. *P. bocaki* n. sp., holotype. **61–63**. *P. cardamonicum* n. sp., holotype. **64–66**. *P. coeruleum*, lectotype.



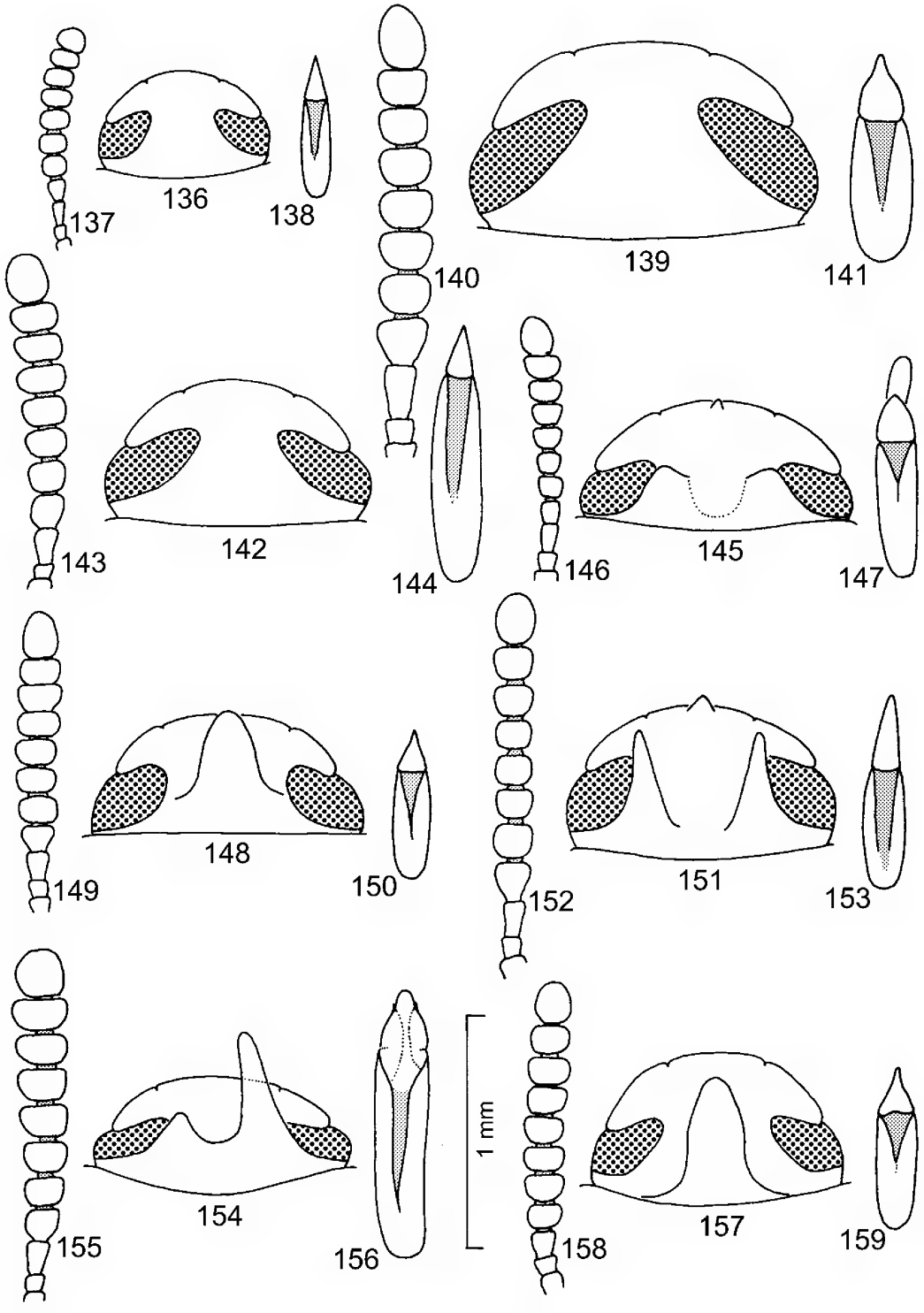
Figs. 67–90. Male head, antenna and aedeagus of *Platydema* species. – **67–69.** *P. flavosericeum*, Sri Lanka. **70–72.** *P. fumosum*, China. **73–75.** *P. indicum*, Thailand. **76–78.** *P. cechenosternoides*, Thailand. **79–81.** *P. flavopictum*, Taiwan. **82–84.** *P. guangxicum* n. sp., holotype. **85–87.** *P. jacobsoni*, Borneo. **88–90.** *P. javanicum*, holotype.



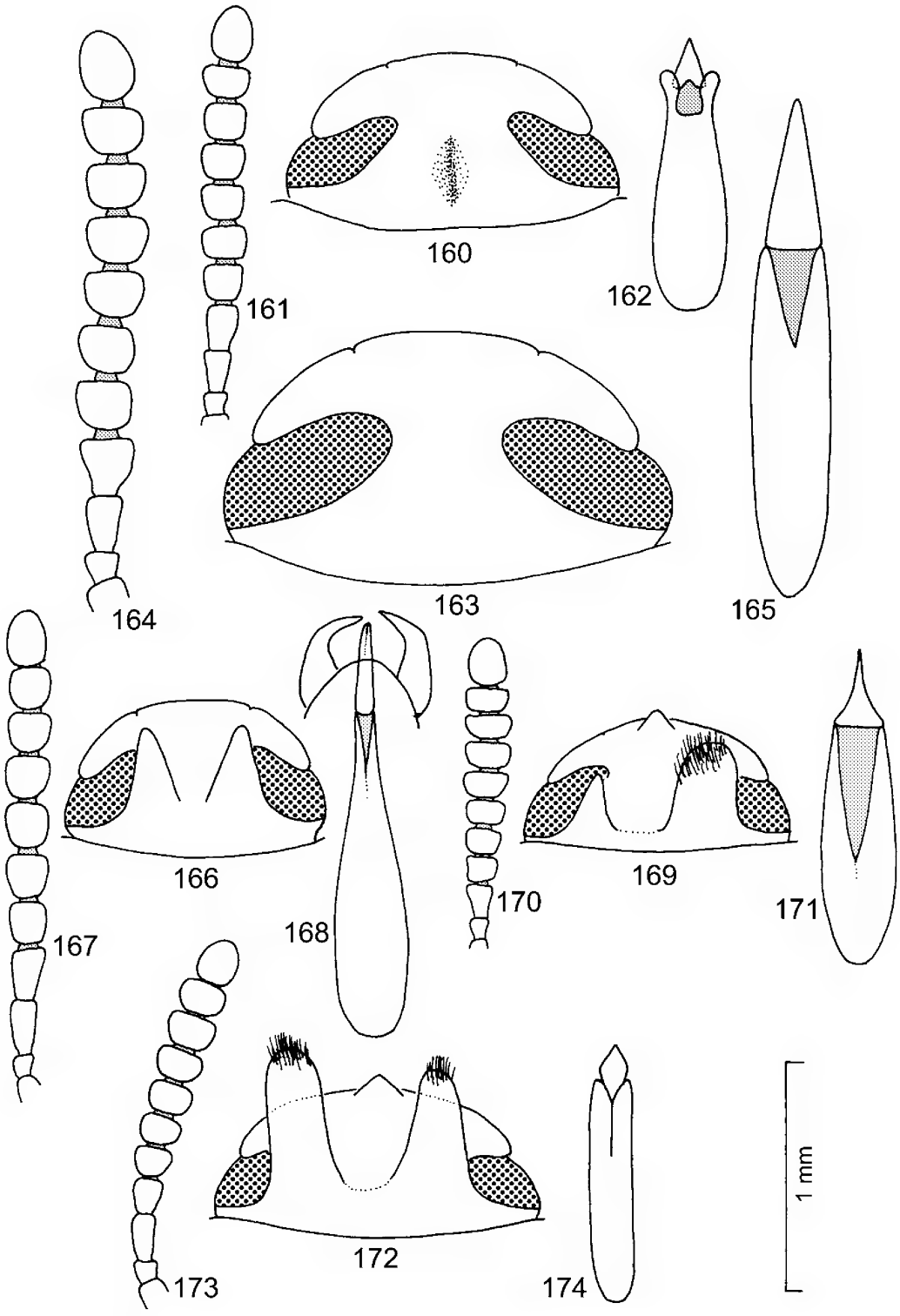
Figs. 91–111. Male head, antenna and aedeagus of *Platydema* species. – **91–93**. *P. loebli* n. sp., holotype. **94–96**. *P. lewisi*, paratype. **97–99**. *P. javanum*, Sumatra. **100–102**. *P. longivittis*, paratype. **103–105**. *P. maculicolle*, Java. **106–108**. *P. marseuli*, Japan. **109–111**. *P. kovaci* n. sp., holotype.



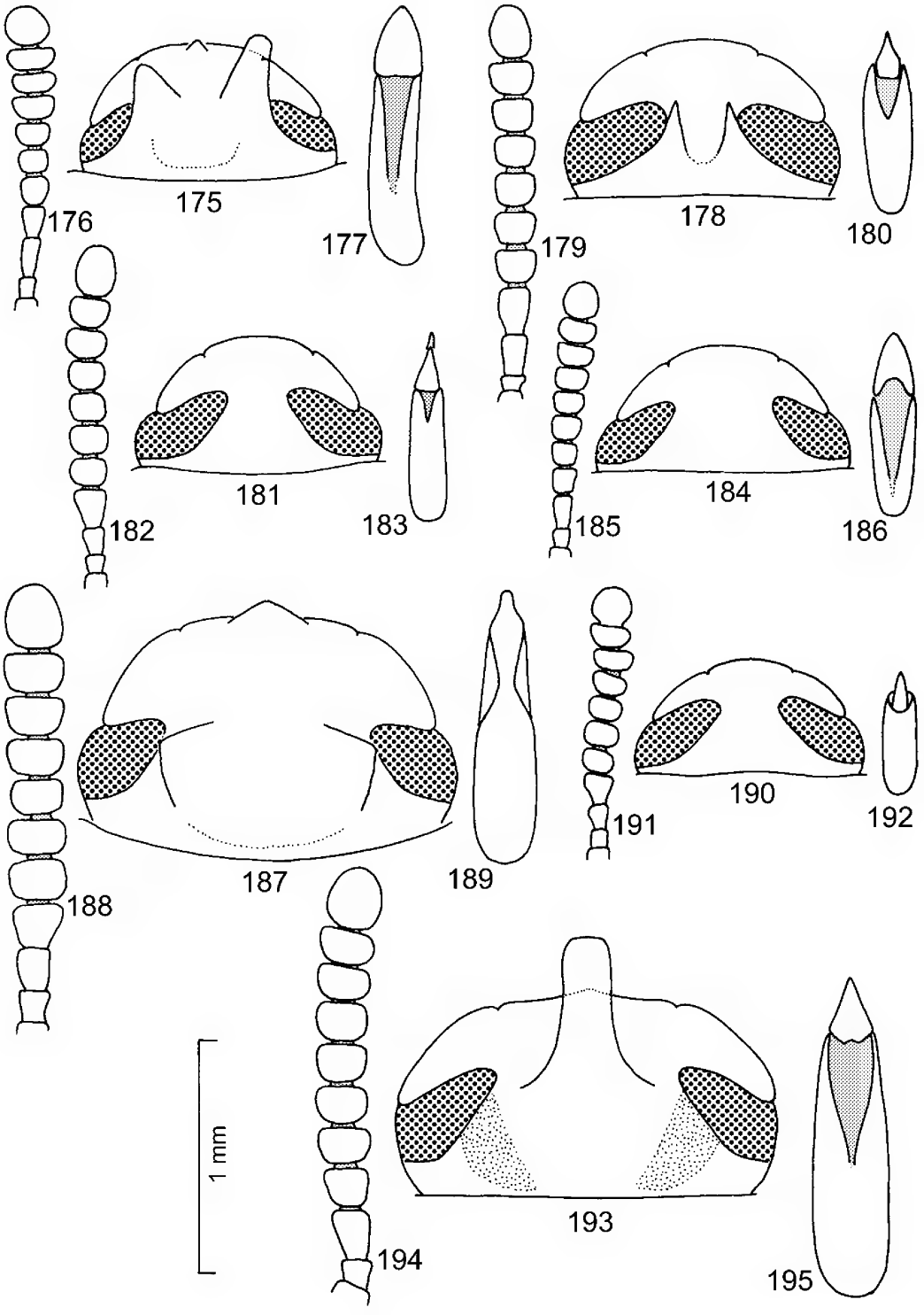
Figs. 112–135. Male head, antenna and aedeagus of *Platydema* species. – **112–114.** *P. masumotoi* n. sp., holotype. **115–117.** *P. mindanaoicum* n. sp., holotype. **118–120.** *P. monoceros*, "plesiotype", Mentawei. **121–123.** *P. merkli* n. sp., holotype. **124–126.** *P. orientalis*, Thailand. **127–129.** *P. pentaphylloides*, Malaysia. **130–132.** *P. palungicum* n. sp., holotype. **133–135.** *P. nuciferae*, Solomon Islands.



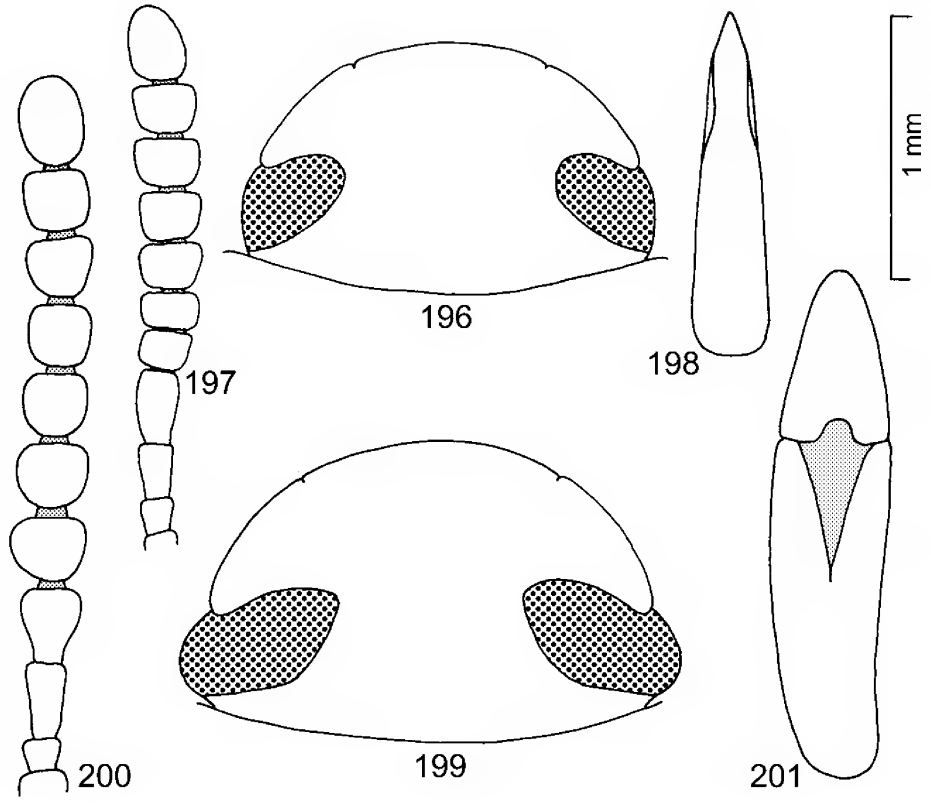
Figs. 136–159. Male head, antenna and aedeagus of *Platydema* species. – **136–138.** *P. pallidicolle*, Borneo. **139–141.** *P. planum*, holotype. **142–144.** *P. perpolitum*, Sumatra. **145–147.** *P. poringicum* n. sp., holotype. **148–150.** *P. rectum*, paratype. **151–153.** *P. recticorne*, Japan. **154–156.** *P. riedeli* n. sp., holotype. **157–159.** *P. ribbei*, Sulawesi.



Figs. 160–174. Male head, antenna and aedeagus of *Platydema* species. – **160–162.** *P. reibnitzi* n. sp., holotype. **163–165.** *P. sauteri*, lectotype. **166–168.** *P. schultheissi*, holotype. **169–171.** *P. seminitens*, Brunei. **172–174.** *P. sericeum*, Borneo.



Figs. 175–195. Male head, antenna and aedeagus of *Platydema* species. – **175–177**. *P. sericeoideum*, Sri Lanka. **178–180**. *P. sulawesicum* n. sp., holotype. **181–183**. *P. sumatranum*, Borneo. **184–186**. *P. suturatum*, Borneo. **187–189**. *P. tricuspis*, Borneo. **190–192**. *P. waterhousei*, Borneo. **193–195**. *P. unicornis*, W Malaysia.



Figs. 196–201. Male head, antenna and aedeagus of *Platydema* species. – **196–198.** *P. velutinum*, Sri Lanka. **199–201.** *P. yunnanicum* n. sp., holotype.

Etymology: Named after the Chinese Province Guangxi where the type series was collected.

Description: Body length 6.0 mm. Dorsal side glabrous and unicoloured dark brown with distinct metallic shine, surface shining; tibiae and tarsi light brown (Fig. 6). Head with distinct, but not confluent punctation. Head in males (Fig. 82): frons with two long symmetrical horns pointing forewards, horns without setation; clypeus medially with a distinct tooth. Proportions of the antennal segments as in Fig. 83, antennomere 3 short. Pronotum transverse and flat, with finer but not sparser punctation than on head, basally on each side with a feeble impression; basal margin completely, distal and lateral margins finely and completely bordered; anterior margin distinctly excavated and anterior corners protruding. Propleura with similar punctation as on pronotum, punctures with short setae, without longitudinal wrinkles. Elytra slightly convex and oval, 1.3 times longer than wide, besides scutellar row and lateral margin with 8 rows of punctures without striae (third row with about 40 punctures); intervals flat and with similar punctation as on pronotum, without setation. Abdominal sternites with short setation, lateral punctures sometimes confluent. Legs without peculiarities, male tarsi not dilatated, tibiae externally with crenulated indistinct keels. Aedeagus as in Fig. 84.

Diagnosis: *Platydema guangxicum* n. sp. shares with *Platydema higonium* the body size, the metallic dorsal surface and the armature of the male head with two symmetrical horns and a distinct medial clypeal tooth, but can be recognized by the extreme transverse pronotum being quite unusual among the congeners, and by the shape of the aedeagus with acute triangular joint parameres.

Platydema kovaci n. sp. (Figs. 39, 109–111)

Holotype (♂): W Malaysia, Ulu Gombak, on dead bamboo, 15.X.1995, leg. D. Kovac, SMF (C 16333).

Paratypes: Same data es holotype, 2 ex SMF (C 16334, C 16335). – Same locality and collector, 28.VIII.1995, 1 ex. SMF (C 16336). – Same locality and collector, 29.VIII.1995, 1 ex. SMF (C 16337). – Same locality and collector, 31.VIII.1995, 10 ex. SMF (C 16338–16347), 2 ex. SMNS. – W Malaysia, Pahang, 3 km E Fraser's Hill, Gap, 15.VII.1992, leg. C. W. & L. B. O'Brien, 1 ex. HNHM. – W Malaysia, Perak, Cameron Highlands, 31 km N Tapah, 16.VII.1992, leg. C. W. & L. B. O'Brien, 2 ex. HNHM. – SE Thailand, Ko Chang Island, 8.–12.VII.1997, leg. J. Rejsek, 1 ex. SMNS.

Etymology: Named after Dr. Damir Kovac (Frankfurt/Main), who discovered this species during his field work upon the bamboo ecosystems in SE Asia.

Description: Body length 3.8–5.0 mm. Dorsal side glabrous and with colour pattern: head and pronotum dark brown without any metallic shine, elytra distinctly lighter, yellow-brown without any metallic shine, surface shining; antenna dark, tibiae and tarsi somewhat lighter (Fig. 39). Head with fine and sparse punctation. Head in males (Fig. 109): frons with a long right horn pointing forewards, left horn reduced and only tubercle-like, horns without setation; clypeus medially without any armature. Proportions of the antennal segments as in Fig. 110, antennomere 3 short. Pronotum slightly convex, with fine punctation as on head, basally on each side with a distinct impression; basal margin and distal margin medially unbordered, lateral margins finely and completely bordered; anterior margin only slightly excavated and anterior corners not protruding. Propleura with similar punctation as on pronotum, without longitudinal wrinkles. Elytra convex and round, 1.2 times longer than wide, besides scutellar row and lateral margin with 8 rows of punctures without striae (third row with about 50 punctures); intervals flat and without distinct punctation. Abdominal sternites with short setation, laterally with confluent punctures forming distinct longitudinal wrinkles. Legs without peculiarities, male tarsi not dilatated, tibiae externally with crenulated indistinct keels. Aedeagus as in Fig. 111.

Diagnosis: *Platydema kovaci* n. sp. can be recognized by the round body shape, by the colour pattern with dark pronotum and light brown elytra, by the male head with a single developed (right) horn without setation, by an unarmed clypeus, by fine elytral rows without striae and by the shape of the aedeagus. Only *Platydema riedeli* n. sp. from Sumatra is similar, but apart from a different aedeagus, the dorsal colour pattern is also different (pronotum not darker than elytra, elytra with a joint dark spot in the anterior part in *Platydema riedeli* n. sp.). The general body shape and size as well as the aedeagus of *Platydema kovaci* n. sp. is similar as in *Platydema becvari* n. sp., but this species is smaller, the pronotum and elytra are unicoloured brown, the male head bears two symmetrical short horns, and the punctures of the elytral rows are somewhat bigger.

Platydema loebli n. sp. (Figs. 31, 91–93)

Holotype (♂): S India, Kerala, Cardamon Hills, Valara Fall, 450–500 m, 25.XI.1972, leg. C. Besuchet, I. Löbl & R. Mussard, MHNG (*P. jacobsoni* det. Kaszab).

Paratypes: S India, Kerala, Cardamon Hills, Kumily, 1000 m, 6.XI.1972, leg. C. Besuchet, I. Löbl & R. Mussard, 1 ex. MHNG. – S India, Kerala, 15 km SW Munnar, Kallar Valley, 1000 m, 6.–18.XII.1993, leg. D. Boukal & Z. Kejval, 1 ex. CSBC. – S India, Kerala, Cardamon Hills, 10 km SW Munnar, Vattiar, 1000 m, 5.–17.XII.1993, leg. D. Boukal & Z. Kejval, 1 ex. CSBC. – S India, Kerala, 15 km SW Munnar, Kallar Valley, 1250 m, 1.–9.V.1997, leg. L. Dembický & P. Pacholátko, 2 ex. NHMB, 1 ex. SMNS.

Etymology: Named after Dr. Ivan Löbl (Geneva), collector of the holotype and partner of long-term cooperation.

Description: Body length 3.8–4.0 mm. Dorsal side glabrous and with colour pattern: head and pronotum blackish brown without any metallic shine; elytra yellow with a dark spot in the middle of the base and an irregular transverse band in the middle not reaching the suture and sometimes interrupted forming two separate spots on each elytron, surface shining; tibiae and tarsi somewhat lighter (Fig. 31). Head with irregular and sparse, partly confluent punctation. Head in males (Fig. 91): frons with two long asymmetrical horns, right horn longer and pointing more upwards, left horn shorter and pointing forewards, horns without setation; clypeus medially with a distinct tooth. Proportions of the antennal segments as in Fig. 92, antennomere 3 long. Pronotum slightly convex, with finer and sparser punctation than on head, basally on each side with a feeble impression; basal margin completely and distal margin medially unbordered, lateral margins finely and completely bordered; anterior margin only slightly excavated and anterior corners not protruding. Propleura with similar punctation as on pronotum, without longitudinal wrinkles. Elytra convex and round, 1.1 times longer than wide, besides scutellar row and lateral margin with 8 rows of punctures in distinct striae (third row with about 40 punctures); intervals feebly convex and with distinctly finer and sparser punctation than on pronotum, without setation. Abdominal sternites with short setation, lateral punctures sometimes confluent. Legs without peculiarities, male tarsi not dilatated, tibiae externally with crenulated indistinct keels. Aedeagus as in Fig. 93.

Diagnosis: *Platydema loebli* n. sp. has a similarly armed male head and a colour pattern on the elytra similar to *Platydema jacobsoni* Gebien, 1927, but the body shape is distinctly rounder and more convex, the basal antennomeres are longer and narrower and the aedeagus is different with the parameres completely hidden in the basal piece. *Platydema pictipenne* Gebien, 1925 is also similar concerning head armature and colour pattern, and also concerning the longer basal antennomeres, but the body is flat as in *Platydema jacobsoni*, the head is without a medial clypeal tooth and the aedeagus is different.

Platydema masumotoi n. sp. (Figs. 32, 112–114)

Holotype (♂): Borneo, Sabah, Mt. Kinabalu, 1750 m, 21.IV.1987, leg. D. Burckhardt & I. Löbl, MHNG.

Paratypes: Borneo, Sabah, Mt. Kinabalu, 1500 m, 25.IV.1987, leg. D. Burckhardt & I. Löbl, 1 ex. MHNG. – Borneo, Sabah, Kinabalu NP, Headquarters, Silau-Silau trail, 1550 m, 2.IX.1988, leg. A. Smetana, 1 ♀ MHNG. – Borneo, Sabah, Crocker Range, km 60 Kota Kinabalu-Tambunan, 1350 m, 17.V.1987, leg. D. Burckhardt & I. Löbl, 2 ex. MHNG, 1 ex. SMNS. – Borneo, Kundasung, 3.VIII.1980, leg. M. Nishikawa [in Japanese], 2 ex. CKMT, 1 ex. SMNS.

Etymology: Named after Dr. KIMIO MASUMOTO (Tokyo) for long-term cooperation in tenebrionid systematics.

Description: Body length 4.3–4.4 mm. Dorsal side glabrous and with colour pattern: head and pronotum reddish brown without any metallic shine; elytra dark brown with a reddish brown transverse band before the base, with reddish elytral intervals 1–2 along the suture in the posterior part of the elytra and with a reddish tip of the elytra, surface shining; tibiae and tarsi somewhat lighter (Fig. 32). Head with irregular and sparse, not confluent punctation. Head in males (Fig. 112): frons with two asymmetrical horns, right horn longer and pointing more upwards, left horn shorter and pointing forewards, tip of the right horn with sparse setation; clypeus medially with a distinct tooth. Proportions of the antennal segments as in Fig. 113, antennomere 3 short. Pronotum slightly convex, with similar punctation as on head, basally on each side with a feeble impression; basal margin completely and distal margin medially unbordered, lateral margins finely and completely bordered; anterior margin only slightly excavated and anterior corners not protruding. Propleura with similar punctation as on pronotum, without longitudinal wrinkles. Elytra convex and oval, 1.2 times longer than wide, besides scutellar row and lateral margin with 8 rows of punctures without striae (third row with about 47 punctures); intervals flat and with distinctly finer and sparser punctation than on pronotum, without setation. Abdominal sternites with short setation, lateral punctures sometimes confluent. Legs without peculiarities, male tarsi not dilatated, tibiae externally with crenulated indistinct keels. Aedeagus as in Fig. 114.

Diagnosis: *Platydema masumotoi* n. sp. possesses the same armature of the male head as *Platydema subfascium* with two asymmetrical horns, the tip of the longer right horn with setation and the clypeus with an additional tooth. It can be recognized by a completely different colour pattern of the elytra and by a different aedeagus. The dorsal colour pattern and the aedeagus are similar as in *Platydema suturatum*, but the male head of this species is without armature.

Platydema merkli **n. sp.** (Figs. 35, 121–123)

Holotype (♂): Sumatra, Prov. Aceh-Selatan, Babahrot, 100 m, 19.–22.VII.1983, leg. J. KLAPPERICH, HNHM.

Paratype: Same data as holotype, 1 ♀ SMNS.

Etymology: Named after Dr. OTTÓ MERKL (Budapest) for long-term cooperation in tenebrionid systematics.

Description: Body length 3.5–3.6 mm. Dorsal side glabrous and with colour pattern: dorsal side dark brown without any metallic shine; elytra in the anterior part with a reddish brown transverse band, surface shining; tibiae and tarsi somewhat lighter (Fig. 35). Head with irregular and sparse, not confluent punctation. Head in males (Fig. 121): frons with two long symmetrical horns pointing forewards, without setation; clypeus medially with a distinct tooth. Proportions of the antennal segments as in Fig. 122, antennomere 3 short. Pronotum slightly convex, with similar punctation as on head, basally on each side with a feeble impression; basal margin completely and distal margin medially unbordered, lateral margins finely and completely bordered; anterior margin only slightly excavated and anterior corners not protruding. Propleura with similar punctation as on pronotum, without longitudinal wrinkles. Elytra convex and oval, 1.3 times longer than wide, besides scutellar row and lateral margin with 8 rows of punctures without striae (third row with

about 43 punctures); intervals flat and with somewhat finer and sparser punctation than on pronotum, without setation. Abdominal sternites with short setation, lateral punctures sometimes confluent. Legs without peculiarities, male tarsi not dilatated, tibiae externally with crenulated indistinct keels. Aedeagus as in Fig. 123.

Diagnosis: *Platydema merkli* n. sp. belongs to the group of small species without metallic shine and with two long, symmetrical horns without setation on the male head around *Platydema indicum* Gebien, 1940. It differs from *Platydema indicum* mainly by a smaller body size, by a different dorsal colour pattern and by a different shape of the aedeagus. The dorsal colour pattern as well as body size and shape is similar as in *Platydema suturatum*, but this species has an unarmed male head and also a different shape of the aedeagus.

Platydema mindanaoicum **n. sp.** (Figs. 22, 115–117)

Holotype (♂): Philippines, Mindanao, 30 km E Malaybalay, Busdi, 5.–9.V.1996, leg. L. Bolm, SMNS.

Paratypes: Same data as holotype, 9 ex. SMNS, 2 ex. DEI, 2 ex. HNHM, 3 ex. CRGT.

Etymology: Named after the Philippine island Mindanao where the type series was collected.

Description: Body length 4.2–4.5 mm. Dorsal side glabrous and unicoloured dark brown with distinct metallic shine, surface shining; tibiae and tarsi light brown (Fig. 22). Head with fine and sparse punctation. Head in males (Fig. 115): frons with two symmetrical horns pointing forewards, horns without setation; clypeus medially without a distinct tooth. Proportions of the antennal segments as in Fig. 116, antennomere 3 short. Pronotum slightly convex, with same punctation as on head, basally on each side with a feeble impression; basal margin completely unbordered, distal and lateral margins finely and completely bordered; anterior margin only slightly excavated and anterior corners not protruding. Propleura with similar punctation as on pronotum, without longitudinal wrinkles. Elytra convex and oval, 1.3 times longer than wide, besides scutellar row and lateral margin with 8 rows of punctures without striae (third row with about 55 punctures); intervals flat and with somewhat finer and sparser punctation than on pronotum, without setation. Abdominal sternites with short setation, lateral punctures sometimes confluent. Legs without peculiarities, male tarsi not dilatated, tibiae externally with crenulated indistinct keels. Aedeagus as in Fig. 117.

Diagnosis: *Platydema mindanaoicum* n. sp. shares with *Platydema marseuli* the small body size with an unicoloured metallic dorsal surface and the pair of symmetrical long horns on the male head, but can be recognized by a somewhat rounder body shape, by flat intervals and elytral rows without striae (in *P. marseuli* somewhat convex and elytral rows in striae), and by a completely different aedeagus with a protruding tongue-like penis.

Platydema palungicum **n. sp.** (Figs. 49, 130–132)

Holotype (♂): Borneo, Kalimantan Barat, Gunung Palung NP, Cabang Panti research site, lowland rainforest in fungi, 18.–26.VII.1993, leg. O. Merkl, HNHM.

Paratype: Same data as holotype, 1 ex. SMNS.

Etymology: Named after Gunung (= Mount) Palung where the type series was collected.

Description: Body length 5.0–5.3 mm. Dorsal side glabrous and with colour pattern: dorsal side dark brown without any metallic shine, pronotum somewhat

lighter reddish brown; elytra with a lighter smaller spot in the anterior part and a somewhat darker bigger spot in the posterior part, both spots not reaching the suture, surface shining; tibiae and tarsi somewhat lighter (Fig. 49). Head with distinct but not confluent punctation. Head in males (Fig. 130) without any sexual characters. Proportions of the antennal segments as in Fig. 131, antennomere 3 long. Pronotum slightly convex, with finer and sparser punctation than on head, basally on each side with a feeble impression; basal margin completely unbordered, distal and lateral margins finely and completely bordered; anterior margin only slightly excavated and anterior corners not protruding. Propleura with similar punctation as on pronotum, without longitudinal wrinkles. Elytra slightly convex and oval, 1.3 times longer than wide, besides scutellar row and lateral margin with 8 rows of punctures without striae (third row with about 50 punctures); intervals flat and with distinctly finer and sparser punctation than on pronotum, without setation. Abdominal sternites with short setation, lateral punctures sometimes confluent. Legs without peculiarities, male tarsi not dilatated, tibiae externally with crenulated indistinct keels. Aedeagus as in Fig. 132.

Diagnosis: *Platydema palungicum* n. sp. shares with *Platydema perpolitum* the body shape and dorsal colour pattern without any metallic shine as well as the unarmed male head, but can be distinguished by a bigger body size with 5.0–5.3 mm (3.0–4.5 mm in *P. perpolitum*), by a bigger anterior spot on the elytra, by denser punctation on the pronotum and by a finer punctation of the elytral rows, and mainly by a different aedeagus (Figs. 132, 144).

Platydema poringicum **n. sp.** (Figs. 33, 145–147)

Holotype (♂): Borneo, Sabah, Kinabalu NP, Poring Hot Springs, 480 m, 20.VIII.1988, leg. A. Smetana, MHNG.

Etymology: Named after Poring Hot Springs where the holotype was collected.

Description: Body length 3.8 mm. Dorsal side glabrous and with colour pattern: head and pronotum brown without any metallic shine; elytra yellow with a brown spot in the middle of the base and an irregular cross-like brown spot in the posterior part, surface shining; tibiae and tarsi somewhat lighter (Fig. 33). Head with rough but not confluent punctation. Head in males (Fig. 145): frons with two short asymmetrical horns, right horn somewhat longer and pointing more upwards, left horn shorter and pointing forewards, horns without setation; clypeus medially with a weak tooth. Proportions of the antennal segments as in Fig. 146, antennomere 3 short. Pronotum slightly convex, with somewhat finer and sparser punctation than on head, basally on each side with a feeble impression; basal margin completely and distal margin medially unbordered, lateral margins finely and completely bordered; anterior margin only slightly excavated and anterior corners not protruding. Propleura with similar punctation as on pronotum, without longitudinal wrinkles. Elytra convex and oval, 1.3 times longer than wide, besides scutellar row and lateral margin with 8 rows of punctures in striae (third row with about 50 punctures); intervals feebly convex and with distinctly finer and sparser punctation than on pronotum, without setation. Abdominal sternites with short setation, lateral punctures sometimes confluent. Legs without peculiarities, male tarsi not dilatated, tibiae externally with crenulated indistinct keels. Aedeagus as in Fig. 147.

Diagnosis: *Platydema poringicum* n. sp. has a body size and shape as well as the

armature of the male head similar to *Platydema pictipenne* from southern India, but the aedeagi are distinctly different (compare SCHAWALLER 2003: fig. 21).

Platydema reibnitzi **n. sp.** (Figs. 27, 160–162)

Holotype (♂): S Sumatra, Lampung Prov., Bukit Barisan Selatan NP, 5 km SW Liwa, 600 m, 7.–17.II.2000, leg. J. BEZDĚK, SMNS.

Paratypes: Same data as holotype, 1 ♀ SMNS. – Sumatra, Prov. Aceh-Selatan, Babahrot, 100 m, 19.–22.VII.1983, leg. J. KLAPPERICH, 1 ex. HNHM. – Borneo, Sabah, Poring Hot Springs, 500 m, 8.V.1987, leg. D. BURCKHARDT & I. LÖBL, 1 ex. MHNG. – W Malaysia, Selangor, Hutan Kanching, 20 km N Kuala Lumpur, 16.VIII.1993, leg. R. SCHUH, 1 ex. CRSW, 1 ex. CSBC.

Etymology: Named after JOHANNES REIBNITZ (SMNS) for his current and professional help in preparing photographs and arranging plates for publication.

Description: Body length 4.0–4.7 mm. Dorsal side glabrous and with colour pattern: dorsal side light brown without any metallic shine, head somewhat darker, pronotum with a darker mediobasal spot; elytra with a dark spot in the middle of the base and an irregular transverse dark band in the middle reaching the suture and prolonged along suture backwards, surface shining; tibiae and tarsi somewhat lighter (Fig. 27). Head with rough, partly confluent punctation. Head in males (Fig. 160): frons with an indistinct longitudinal impression, without further modifications. Proportions of the antennal segments as in Fig. 161, antennomere 3 short. Pronotum slightly convex, with finer and sparser punctation than on head, basally on each side with a feeble impression; basal margin completely and distal margin medially unbordered, lateral margins finely and completely bordered; anterior margin only slightly excavated and anterior corners not protruding. Propleura with similar punctation as on pronotum, without longitudinal wrinkles. Elytra convex and oval, 1.2 times longer than wide, besides scutellar row and lateral margin with 8 rows of punctures in feeble striae (third row with about 50 punctures); intervals feebly convex and with distinctly finer and sparser punctation than on pronotum, without setation. Abdominal sternites with short setation, lateral punctures sometimes confluent. Legs without peculiarities, male tarsi not dilatated, tibiae externally with crenulated indistinct keels. Aedeagus as in Fig. 162.

Diagnosis: *Platydema reibnitzi* n. sp. has a dorsal colour pattern similar to *Platydema jacobsoni* Gebien, 1927, but the body shape is somewhat rounder (Figs. 27, 44), the male head possesses only a feeble impression, not a distinct armature (Figs. 85, 160), and the aedeagus is different with quite unique ear-like dilatations distally on each side of the basal piece (Figs. 87, 162).

Platydema riedeli **n. sp.** (Figs. 48, 154–156)

Holotype (♂): W Sumatra, Bukittinggi, Batang Palupuh, 1400–1500 m, 19.X.1991, leg. A. RIEDEL, SMNS.

Etymology: Named after Dr. ALEXANDER RIEDEL (Karlsruhe), collector of the holotype, for long-term cooperation.

Description: Body length 4.2 mm. Dorsal side glabrous and with colour pattern: head, pronotum and elytra brown without any metallic shine, elytra with a joint dark spot in the anterior part, surface shining; antenna dark, tibiae and tarsi lighter (Fig. 154). Head with fine and sparse punctation. Head in males (Fig. 48): frons with a longer right horn pointing forewards, left horn reduced and only

tubercle-like, horns without setation; clypeus medially without any armature. Proportions of the antennal segments as in Fig. 155, antennomere 3 short. Pronotum slightly convex, with fine punctation as on head, basally on each side with a distinct impression; basal margin and distal margin medially unbordered, lateral margins finely and completely bordered; anterior margin only slightly excavated and anterior corners not protruding. Propleura with similar punctation as on pronotum, without longitudinal wrinkles. Elytra convex and round, 1.2 times longer than wide, besides scutellar row and lateral margin with 8 rows of punctures without striae (third row with about 40 punctures); intervals flat and without distinct punctation. Abdominal sternites with short setation, laterally with confluent punctures forming distinct longitudinal wrinkles. Legs without peculiarities, male tarsi not dilatated, tibiae externally with crenulated indistinct keels. Aedeagus as in Fig. 156.

Diagnosis: *Platydema riedeli* n. sp. shares with *Platydema kovaci* n. sp. from W Malaysia the round body shape, the brown surface without any metallic shine, the male head with a single developed (right) horn without setation, the unarmed clypeus, and the fine elytral rows without striae. It can be recognized by a different colour pattern (in *Platydema kovaci* n. sp. elytra unicoloured brown without spot but pronotum darker) and by the different shape of the aedeagus.

Platydema sulawesicum **n. sp.** (Figs. 36, 178–180)

Holotype (♂): Central Sulawesi, 17 km E Pendolo, 800 m, 4.–9.VII.1999, leg. L. Bolm, SMNS.

Paratypes: Same data as holotype, 2 ex. SMNS. – Central Sulawesi, Poso, 5–10 km SW Tambarana, 1–400 m, 11.–16.IV.1999, leg. S. Bečvář & P. Zábranský, 2 ex. CSBC. – Central Sulawesi, 20–35 km NW Palopo, 1000–1400 m, 4.–5.IV.1999, leg. S. Bečvář & P. Zábranský, 1 ex. CSBC, 1 ex. SMNS.

Etymology: Named after the island Sulawesi where the type series was collected.

Description: Body length 4.3–5.0 mm. Dorsal side glabrous and with colour pattern: dorsal side dark brown without any metallic shine; elytra before the middle with a yellow transverse band interrupted at the suture and with a irregular yellow spot before the end, surface shining; tibiae and tarsi somewhat lighter (Fig. 36). Head with distinct but not confluent punctation. Head in males (Fig. 178): frons with two symmetrical horns pointing forewards, without setation; clypeus medially without distinct tooth. Proportions of the antennal segments as in Fig. 179, antennomere 3 short. Pronotum slightly convex, with finer and sparser punctation than on head, basally on each side with a feeble impression; basal margin completely and distal margin medially unbordered, lateral margins finely and completely bordered; anterior margin only slightly excavated and anterior corners not protruding. Propleura with similar punctation as on pronotum, without longitudinal wrinkles. Elytra convex and oval, 1.3 times longer than wide, besides scutellar row and lateral margin with 8 rows of punctures without striae (third row with about 40 punctures); intervals flat and with somewhat finer and sparser punctation than on pronotum, without setation. Abdominal sternites with short setation, lateral punctures sometimes confluent. Legs without peculiarities, male tarsi not dilatated, tibiae externally with crenulated indistinct keels. Aedeagus as in Fig. 180.

Diagnosis: *Platydema sulawesicum* n. sp. shares with *Platydema planum* Gebien, 1914 and *Platydema ribbei* Gebien, 1925 the general body size and shape as well as the similar dorsal colour pattern without any metallic shine and with similar

yellow spots, but can be recognized, apart from the different aedeagus, by two symmetrical horns on the male head (head without armature in *P. planum*, with a single medial horn in *P. ribbei*).

Platydema yunnanicum n. sp. (Figs. 10, 199–201)

Holotype (♂): China, Yunnan, E slope of Habashan Mts., 3000–3800 m, 13.–17.VII.1992, leg. V. Kubáň, CSBC.

Paratypes: Same data as holotype, 1 ex. SMNS. – China, Yunnan, E slope of Habashan Mts., 2000–3000 m, 10.–13.VII.1992, leg. V. Kubáň, 1 ex. SMNS. – China, Yunnan, 35 km N Lijiang, Heishu Mts., 1.–19.VII.1992, leg. S. Bečvář, 3 ex. CSBC. – China, Yunnan, 35 km N Lijiang, Heishu Mts., 18.VI.–4.VII.1993, leg. S. Bečvář, 1 ex. CSBC.

Etymology: Named after the Chinese Province Yunnan where the type series was collected.

Description: Body length 7.5–9.0 mm. Dorsal side glabrous and unicoloured dark brown with distinct metallic shine, surface shining; tibiae and tarsi light brown (Fig. 10). Head with fine but distinct, not confluent punctation. Head in males (Fig. 199) without any sexual characters. Proportions of the antennal segments as in Fig. 200, antennomere 3 short. Pronotum slightly convex, with finer and sparser punctation than on head, basally on each side with a feeble impression; basal margin completely unbordered, distal and lateral margins finely and completely bordered; anterior margin only slightly excavated and anterior corners not protruding. Propleura with similar punctation as on pronotum, basally with indistinct longitudinal wrinkles. Elytra convex and oval, 1.3 times longer than wide, besides scutellar row and lateral margin with 8 rows of punctures without striae (third row with about 55 punctures); intervals flat and with finer and sparser punctation than on pronotum, without setation. Abdominal sternites without setation, lateral punctures sometimes confluent. Legs without peculiarities, male tarsi not dilatated, tibiae externally with crenulated indistinct keels. Aedeagus as in Fig. 201.

Diagnosis: *Platydema yunnanicum* n. sp. belongs to the group of large metallic species with an unarmed male head around *Platydema coeruleum* Gebien, 1925 (Taiwan), *Platydema lynceum* Lewis, 1894 (Japan, Korea), *Platydema sauteri* Gebien, 1913 (Taiwan), and *Platydema shiva* Schawaller, 2003 (Meghalaya). The species of this group can be surely distinguished only by the shape of the aedeagus: the joint parameres are broad tongue-like in *P. yunnanicum* n. sp. (Fig. 201), long triangular and acute in *P. sauteri* (Fig. 165) and different broad triangular in *P. coeruleum* (Fig. 66) and *P. shiva* (Schawaller 2003: fig. 38). Furthermore, in *Platydema yunnanicum* n. sp. the frons between the eyes is comparatively broader than in the other species (Figs. 64, 163, 199). Dorsal punctation and metallic colour of pronotum and elytra are of less value, and also all elytral intervals are absolutely flat and without differences in this species group.

5 Doubtful taxa of *Platydema* Laporte & Brullé, 1831

The following taxa must be considered as nomina dubia, as long the corresponding types are not available for reexamination. The descriptions are too poor to assign these names to definite species. For example, it is cited here the "diagnosis" of *Platydema tenggerense* Pic, 1926 from Java: "Voisin de *chalceum* Geb., pattes plus claires,

dessous roux, etc." Additionally, it might be possible that PIC described further species of *Platydema* falsely as species of other genera, for example in *Ceropria* Castelnau & Brullé, 1831 or in *Cyclobimorphus* Pic, 1916.

Platydema atromaculatum Pic, 1926	Banguey
Platydema bicornutum Pic, 1926	Borneo
Platydema binhanum Pic, 1926	Vietnam
Platydema boucardi Pic, 1926	Sumatra
Platydema coomani Pic, 1926	Vietnam
Platydema crassicorne Motschulsky, 1873	India
Platydema cyaneolimbatum Pic, 1926	Malacca
Platydema demangei Pic, 1926	Vietnam
Platydema discoidale Pic, 1926	Sumatra
Platydema fuscicorne Chevrolat, 1878	Malacca
Platydema holosericeum Marseul, 1876	India
Platydema modigliani Pic, 1926	Mentawei
Platydema ochraceum Motschulsky, 1873	India
Platydema octomaculatum Motschulsky, 1873	India (transferred to *Microcrypticus*)
Platydema particulare Pic, 1929	Annam
Platydema reducticorne Pic, 1926	Sumatra
Platydema reitteri (Pic, 1934)	Sichuan (Tatsienlu = Kangding) (transferred from *Ceropria*)
Platydema rufomarginatum Pic, 1928	Vietnam
Platydema rufoscutum Pic, 1926	Java
Platydema rufotinctum Pic, 1926	Java
Platydema semiolivaceum Pic, 1925	Vietnam
Platydema semirufum Fairmaire, 1896	India
Platydema subovatum Pic, 1929	Vietnam
Platydema tenggerense Pic, 1926	Java
Platydema unicolor Chevrolat, 1878	Sri Lanka
Platydema unicornutum Pic, 1926	Java

6 Transfer to *Ischnodactylus* Chevrolat, 1877

Ischnodactylus bifasciatus (Motschulsky, 1873) **n. comb.**

Basides bifasciatus Motschulsky, 1873.

Studied type-material: India or., 1 ♂, 2 ♀♀ syntypes ZMUM (*Platydema bifasciatum* det. KASZAB).

New material: Sumatra, Liangagas, leg. H. DOHRN, 1 ♂ NHMB-F (*Platydema bifasciatum* det. GEBIEN, labelled as "plesiotype"). – S Thailand, Yala Distr., Betong, Gunung Cang Dun, 25.III.–22.IV.1993, leg. J. HORÁK, 1 ♂, 5 ♀♀ CSBC. – Malaysia, Gunung Ledang (Mt. Ophir), 14.–15.IV.1990, leg. A. RIEDEL, 1 ♂ SMNS. – Malaysia, Sungai Dua Gemas, 19.IV.1975, leg. Y. KIYOYAMA, 1 ex. CKAO. – S Vietnam, 40 km NW An Khe, Buon Luoi, 28.–30.V.1996, leg. L. DEMBICKÝ & P. PACHOLÁTKO, 5 ex. NHMB, 2 ex. SMNS.

Remarks: The male syntype of this taxon bears cephalic horns on the head, which GEBIEN (1925a) considered as generic for the genus *Ischnodactylus* Chevrolat, 1877 („Solche Hornbildung kommt meines Wissens bei keinem Käfer wieder vor."). The flat body and the broad pronotum are further characters of this genus („Der Körper ist im Gegensatz zu *Platydema* immer auffallend flach."). However, in spite of these clear differences, GEBIEN identified a single conspecific male from Sumatra as *Platydema*. In recognition of the differences, I exclude herein this taxon from *Platydema* and transfer it to the genus *Ischnodactylus*. A new synonymy within *Ischnodactylus* may be possible but can be recognized only in a revision of all described species (see also ANDO 2001).

Distribution: "India or." (type locality), Thailand, Malaysia, Vietnam, Sumatra.

Ischnodactylus plagiatus (Motschulsky, 1873) **n. comb.**

Basides plagiatus Motschulsky, 1873.

Studied type-material: India or., 3 ♂♂ syntypes ZMUM (*Platydema plagiatum* det. KASZAB) (cephalic horns partly broken).

Remarks: This taxon belongs to *Ischnodactylus* by the same reasons as discussed for the previous species.

Distribution: "India or."

Ischnodactylus rufopiceus (Motschulsky, 1873) **n. comb.**

Basides rufopiceus Motschulsky, 1873.

Studied type-material: India or., 2 ♂♂, 1 ♀ syntypes ZMUM (*Platydema rufopiceum* det. KASZAB) (cephalic horns partly broken).

Remarks: This taxon belongs to *Ischnodactylus* by the same reasons as discussed for the previous species.

Distribution: "India or."

Ischnodactylus sexpictus (Kaszab, 1939) **n. comb.**

Platydema sexpictum Kaszab, 1939.

Studied type-material: NE Sumatra, Tebing-tinggi, leg. SCHULTHEISS, ♂ holotype DEI.

Remarks: This taxon belongs to *Ischnodactylus* by the same reasons as discussed for the previous species. Probably a synonym of *Ischnodactylus sexguttatus* Gebien, 1925, also from Sumatra.

Distribution: Sumatra.

7 References

ANDO, K. (2001): A review of Sulawesian *Ischnodactylus* (Coleoptera: Tenebrionidae), with revised list of the world species. – Special Publication of the Japanese Coleopterological Society, Osaka **1**: 175–192.

CHEVROLAT, A. (1878): Diagnoses de Diapérides (suite). – Petites Nouvelles entomologiques **2**: 221–222, 242–243.

GEBIEN, H. (1925a): Die Tenebrioniden (Coleoptera) des indomalayischen Gebietes, unter Berücksichtigung der benachbarten Faunen, VI. Die Gattungen *Ischnodactylus*, *Hoplocephala*, und *Martianus*. – The Philippine Journal of Science **27**: 423–452.

GEBIEN, H. (1925b): Die Tenebrioniden (Coleoptera) des indomalayischen Gebietes, unter Berücksichtigung der benachbarten Faunen, VII. Die Gattung *Platydema* Castelnau und Brullé. – The Philippine Journal of Science **27**: 539–595.

GEBIEN, H. (1925c): Die Tenebrioniden (Coleoptera) des indomalayischen Gebietes, unter Berücksichtigung der benachbarten Faunen, VIII. Die Gattungen *Anisocara*, *Spiloscapha*, *Menimus*, *Labidocera*, und *Pentaphyllus*. – The Philippine Journal of Science **28**: 101–128.

GEBIEN, H. (1927): Fauna sumatrensis (Beitrag Nr. 31). Tenebrionidae (Col.). – Supplementa Entomologica **15**: 22–58.

KASZAB, Z. (1954): Über die von Herrn J. KLAPPERICH in der chinesischen Provinz Fukien gesammelten Tenebrioniden (Coleoptera). – Annales historico-naturales Musei nationalis hungarici **5**: 247–264.

KASZAB, Z. (1980): Neue Tenebrioniden (Coleoptera) aus Sri Lanka. I. – Acta Zoologica Academiae Scientarum Hungaricae **26**: 123–196.

KIM, S.-Y. (2003): Systematic study of the subfamily Tenebrioninae (Coleoptera, Tenebrionidae) from Korea, 152 pp.; Seoul (Sungshin Women's University) [in Korean].

MASUMOTO, K. & MAKIHARA, H. (1997): Study on the Tenebrionid Beetles in South Sumatra. – Bulletin of the Forestry and Forest Products Research Institute Ibaraki **374**: 115–153.

NAKANE, T. (1963): New or little-known Coleoptera from Japan and its adjacent regions. XIX. – Fragmenta Coleopterologica **6/7**: 26–30.

SCHAWALLER, W. (2003): The genus *Platydema* Laporte & Brullé in the Himalaya and adjacent regions, with descriptions of five new species (Insecta: Coleoptera: Tenebrionidae). – In: HARTMANN, M. & BAUMBACH, H. (eds.): Biodiversität und Naturausstattung im Himalaya, pp. 269–277, pls. IV–V; Erfurt (Verein der Freunde und Förderer des Naturkundemuseums).

SCHAWALLER, W. (2004): The genus *Platydema* Laporte & Brullé in Africa south of the Sahara and adjacent islands (Coleoptera, Tenebrionidae). – Annals of the Transvaal Museum **41**: 1–27.

TRIPLEHORN, C. A. (1965): Revision of Diaperini of America North of Mexico with notes on extralimital species (Coleoptera: Tenebrionidae). – Proceedings of the United States National Museum, Smithonian Institution **117**: 349–457.

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